Caroline C Ummenhofer

List of Publications by Year
in descending order

67 papers	3,681 citations	201575 27 h-index	133188 59 g-index
75 all docs	75 docs citations	75 times ranked	5603 citing authors

#	Article	IF	Citations
1	What causes southeast Australia's worst droughts?. Geophysical Research Letters, 2009, 36, .	1.5	527
2	Extreme weather and climate events with ecological relevance: a review. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160135.	1.8	467
3	Past and future rainfall in the Horn of Africa. Science Advances, 2015, 1, e1500682.	4.7	175
4	The Indo-Australian monsoon and its relationship to ENSO and IOD in reanalysis data and the CMIP3/CMIP5 simulations. Climate Dynamics, 2013, 41, 3073-3102.	1.7	153
5	Cold Tongue and Warm Pool ENSO Events in CMIP5: Mean State and Future Projections. Journal of Climate, 2014, 27, 2861-2885.	1.2	147
6	Indian and Pacific Ocean Influences on Southeast Australian Drought and Soil Moisture. Journal of Climate, 2011, 24, 1313-1336.	1.2	139
7	Contributions of Indian Ocean Sea Surface Temperatures to Enhanced East African Rainfall. Journal of Climate, 2009, 22, 993-1013.	1.2	136
8	Droughts, Wildfires, and Forest Carbon Cycling: A Pantropical Synthesis. Annual Review of Earth and Planetary Sciences, 2019, 47, 555-581.	4.6	131
9	Coupling of Indo-Pacific climate variability over the last millennium. Nature, 2020, 579, 385-392.	13.7	116
10	Interannual Rainfall Extremes over Southwest Western Australia Linked to Indian Ocean Climate Variability. Journal of Climate, 2006, 19, 1948-1969.	1.2	110
11	Initialized Earth System prediction from subseasonal to decadal timescales. Nature Reviews Earth & Environment, 2021, 2, 340-357.	12.2	85
12	Multidecadal Indian Ocean Variability Linked to the Pacific and Implications for Preconditioning Indian Ocean Dipole Events. Journal of Climate, 2017, 30, 1739-1751.	1.2	77
13	The Contribution of Indian Ocean Sea Surface Temperature Anomalies on Australian Summer Rainfall during El NiÃ±o Events. Journal of Climate, 2011, 24, 3734-3747.	1.2	74
14	Extreme rainfall activity in the Australian tropics reflects changes in the El NiÃ±o/Southern Oscillation over the last two millennia. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4576-4581.	3.3	64
15	Revisiting the Relationship among Metrics of Tropical Expansion. Journal of Climate, 2018, 31, 7565-7581.	1.2	61
16	Expansion and Contraction of the Indo-Pacific Tropical Rain Belt over the Last Three Millennia. Scientific Reports, 2016, 6, 34485.	1.6	60
17	Palaeoclimate perspectives on the Indian Ocean Dipole. Quaternary Science Reviews, 2020, 237, 106302.	1.4	60
18	Modulation of Australian Precipitation by Meridional Gradients in East Indian Ocean Sea Surface Temperature. Journal of Climate, 2009, 22, 5597-5610.	1.2	56

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19	How did ocean warming affect Australian rainfall extremes during the 2010/2011 La NiÃ±a event?. Geophysical Research Letters, 2015, 42, 9942-9951.	1.5	55
20	Australian Monsoon Variability Driven by a Gillâ€“Matsuno-Type Response to Central West Pacific Warming. Journal of Climate, 2010, 23, 4717-4736.	1.2	49
21	A Road Map to IndOOS-2: Better Observations of the Rapidly Warming Indian Ocean. Bulletin of the American Meteorological Society, 2020, 101, E1891-E1913.	1.7	48
22	On the dynamics of the Hadley circulation and subtropical drying. Climate Dynamics, 2014, 42, 2259-2269.	1.7	47
23	Early assessment of seasonal forage availability for mitigating the impact of drought on East African pastoralists. Remote Sensing of Environment, 2016, 174, 44-55.	4.6	45
24	Progress in understanding of Indian Ocean circulation, variability, airâ€“sea exchange, and impacts on biogeochemistry. Ocean Science, 2021, 17, 1677-1751.	1.3	43
25	Pacific Ocean Contribution to the Asymmetry in Eastern Indian Ocean Variability. Journal of Climate, 2013, 26, 1152-1171.	1.2	36
26	North Atlantic salinity as a predictor of Sahel rainfall. Science Advances, 2016, 2, e1501588.	4.7	31
27	Tropical Widening: From Global Variations to Regional Impacts. Bulletin of the American Meteorological Society, 2020, 101, E897-E904.	1.7	31
28	The climate of Myanmar: evidence for effects of the Pacific Decadal Oscillation. International Journal of Climatology, 2015, 35, 634-640.	1.5	29
29	Amplified seasonal cycle in hydroclimate over the Amazon river basin and its plume region. Nature Communications, 2020, 11, 4390.	5.8	29
30	Multidecadal variability of the continental precipitation annual amplitude driven by AMO and ENSO. Geophysical Research Letters, 2015, 42, 526-535.	1.5	28
31	Influences of Pacific Climate Variability on Decadal Subsurface Ocean Heat Content Variations in the Indian Ocean. Journal of Climate, 2018, 31, 4157-4174.	1.2	28
32	400 Years of summer hydroclimate from stable isotopes in Iberian trees. Climate Dynamics, 2017, 49, 143-161.	1.7	24
33	Extremes in East African hydroclimate and links to Indo-Pacific variability on interannual to decadal timescales. Climate Dynamics, 2018, 50, 2971-2991.	1.7	24
34	Twentieth-century Azores High expansion unprecedented in the past 1,200 years. Nature Geoscience, 2022, 15, 548-553.	5.4	24
35	Interdecadal Pacific Oscillation reconstructed from trans-Pacific tree rings: 1350â€“2004 CE. Climate Dynamics, 2019, 53, 3181-3196.	1.7	23
36	The El NiÃ±o â€“ La NiÃ±a cycle and recent trends in supply and demand of net primary productivity in African drylands. Climatic Change, 2016, 138, 111-125.	1.7	22

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37	Tree-ring reconstructed Mayâ€“June precipitation in the Caucasus since 1752 CE. Climate Dynamics, 2016, 47, 3011-3027.	1.7	22
38	The role of the subtropical North Atlantic water cycle in recent US extreme precipitation events. Climate Dynamics, 2018, 50, 1291-1305.	1.7	21
39	A stalagmite test of North Atlantic SST and Iberian hydroclimate linkages over the last two glacial cycles. Climate of the Past, 2018, 14, 1893-1913.	1.3	21
40	Impact of Multidecadal Variability in Atlantic SST on Winter Atmospheric Blocking. Journal of Climate, 2020, 33, 867-892.	1.2	20
41	Increased typhoon activity in the Pacific deep tropics driven by Little Ice Age circulation changes. Nature Geoscience, 2020, 13, 806-811.	5.4	19
42	North Atlantic Natural Variability Modulates Emergence of Widespread Greenland Melt in a Warming Climate. Geophysical Research Letters, 2018, 45, 9171-9178.	1.5	18
43	Hydroclimate variability from western Iberia (Portugal) during the Holocene: Insights from a composite stalagmite isotope record. Holocene, 2020, 30, 966-981.	0.9	18
44	Impact of Surface Forcing on Southern Hemisphere Atmospheric Blocking in the Australiaâ€“New Zealand Sector. Journal of Climate, 2013, 26, 8476-8494.	1.2	17
45	Can Australian Multiyear Droughts and Wet Spells Be Generated in the Absence of Oceanic Variability?. Journal of Climate, 2016, 29, 6201-6221.	1.2	16
46	Pacific climate influences on ocean conditions and extreme shell growth events in the Northwestern Atlantic (Gulf of Maine). Climate Dynamics, 2019, 52, 6339-6356.	1.7	16
47	Importance of Orography for Greenland Cloud and Melt Response to Atmospheric Blocking. Journal of Climate, 2020, 33, 4187-4206.	1.2	16
48	Meridional Gulf Stream Shifts Can Influence Wintertime Variability in the North Atlantic Storm Track and Greenland Blocking. Geophysical Research Letters, 2019, 46, 1702-1708.	1.5	14
49	Heat and freshwater changes in the Indian Ocean region. Nature Reviews Earth & Environment, 2021, 2, 525-541.	12.2	14
50	Understanding physical drivers of the 2015/16 marine heatwaves in the Northwest Atlantic. Scientific Reports, 2021, 11, 17623.	1.6	14
51	On the Predominant Nonlinear Response of the Extratropical Atmosphere to Meridional Shifts of the Gulf Stream. Journal of Climate, 2017, 30, 9679-9702.	1.2	13
52	Evaluation of monsoon seasonality and the tropospheric biennial oscillation transitions in the CMIP models. Geophysical Research Letters, 2012, 39, .	1.5	12
53	Emerging European winter precipitation pattern linked to atmospheric circulation changes over the North Atlantic region in recent decades. Geophysical Research Letters, 2017, 44, 8557-8566.	1.5	12
54	Depth Structure of Ningaloo NiÃ±o/NiÃ±a Events and Associated Drivers. Journal of Climate, 2021, 34, 1767-1788.	1.2	12

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55	A synoptic climatology of heavy rain events in the Lake Eyre and Lake Frome catchments. Frontiers in Environmental Science, 2014, 2, .	1.5	10
56	Distinct Mechanisms of Decadal Subsurface Heat Content Variations in the Eastern and Western Indian Ocean Modulated by Tropical Pacific SST. Journal of Climate, 2018, 31, 7751-7769.	1.2	10
57	Late 20th Century Indian Ocean Heat Content Gain Masked by Wind Forcing. Geophysical Research Letters, 2020, 47, e2020GL088692.	1.5	10
58	Intraseasonal rainfall variability in the Bay of Bengal during the Summer Monsoon: coupling with the ocean and modulation by the Indian Ocean Dipole. Atmospheric Science Letters, 2017, 18, 88-95.	0.8	8
59	Near-Surface Salinity Reveals the Oceanic Sources of Moisture for Australian Precipitation through Atmospheric Moisture Transport. Journal of Climate, 2020, 33, 6707-6730.	1.2	8
60	Improving Australian Rainfall Prediction Using Sea Surface Salinity. Journal of Climate, 2021, 34, 2473-2490.	1.2	5
61	Linking the karst record to atmospheric, precipitation, and vegetation dynamics in Portugal. Chemical Geology, 2020, 558, 119949.	1.4	4
62	The Role of Nearshore Airâ€Sea Interactions for Landfalling Atmospheric Rivers on the U.S. West Coast. Geophysical Research Letters, 2021, 48, e2020GL091388.	1.5	4
63	Albatrosses respond adaptively to climate variability by changing variance in a foraging trait. Global Change Biology, 2021, 27, 4564-4574.	4.2	4
64	Distinct seasonal climate drivers revealed in a network of tree-ring records from Labrador, Canada. Climate Dynamics, 2020, 54, 1897-1911.	1.7	2
65	Relative contributions of heat flux and wind stress on the spatiotemporal upper-ocean variability in the tropical Indian Ocean. Environmental Research Letters, 2020, 15, 084047.	2.2	2
66	Skillful Longâ€Lead Prediction of Summertime Heavy Rainfall in the US Midwest From Sea Surface Salinity. Geophysical Research Letters, 2022, 49, .	1.5	1
67	Reply to Nott: Assessing biases in speleothem records of flood events. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4637-E4637.	3.3	0