Martin Widmann

List of Publications by Year
in descending order

45 papers	7,118 citations	147566 31 h-index	233125 45 g-index
61 all docs	61 docs citations	61 times ranked	8068 citing authors

#	Article	IF	Citations
1	Mid- to Late Holocene climate change: an overview. Quaternary Science Reviews, 2008, 27, 1791-1828.	1.4	1,389
2	Precipitation downscaling under climate change: Recent developments to bridge the gap between dynamical models and the end user. Reviews of Geophysics, 2010, 48, .	9.0	1,256
3	The Effective Number of Spatial Degrees of Freedom of a Time-Varying Field. Journal of Climate, 1999, 12, 1990-2009.	1.2	1,128
4	Towards process-informed bias correction of climate change simulations. Nature Climate Change, 2017, 7, 764-773.	8.1	329
5	Statistical Precipitation Downscaling over the Northwestern United States Using Numerically Simulated Precipitation as a Predictor*. Journal of Climate, 2003, 16, 799-816.	1.2	255
6	Higher probability of compound flooding from precipitation and storm surge in Europe under anthropogenic climate change. Science Advances, 2019, 5, eaaw5531.	4.7	239
7	Multivariate statistical modelling of compound events via pair-copula constructions: analysis of floods in Ravenna (Italy). Hydrology and Earth System Sciences, 2017, 21, 2701-2723.	1.9	206
8	<scp>VALUE</scp>: A framework to validate downscaling approaches for climate change studies. Earth's Future, 2015, 3, 1-14.	2.4	167
9	An intercomparison of a large ensemble of statistical downscaling methods over Europe: Results from the VALUE perfect predictor crossâ€validation experiment. International Journal of Climatology, 2019, 39, 3750-3785.	1.5	164
10	Skill, Correction, and Downscaling of GCM-Simulated Precipitation. Journal of Climate, 2012, 25, 3970-3984.	1.2	147
11	Validation of Mesoscale Precipitation in the NCEP Reanalysis Using a New Gridcell Dataset for the Northwestern United States. Journal of Climate, 2000, 13, 1936-1950.	1.2	132
12	A principal component and long-term trend analysis of daily precipitation in Switzerland. International Journal of Climatology, 1997, 17, 1333-1356.	1.5	121
13	Increased probability of compound long-duration dry and hot events in Europe during summer (1950â€“2013). Environmental Research Letters, 2019, 14, 094006.	2.2	103
14	Using data assimilation to study extratropical Northern Hemisphere climate over the last millennium. Climate of the Past, 2010, 6, 627-644.	1.3	93
15	Historical SAM Variability. Part I: Century-Length Seasonal Reconstructions*. Journal of Climate, 2009, 22, 5319-5345.	1.2	90
16	Early peak in Antarctic oscillation index. Nature, 2004, 432, 290-291.	13.7	89
17	Soil Moisture Drought in Europe: A Compound Event of Precipitation and Potential Evapotranspiration on Multiple Time Scales. Journal of Hydrometeorology, 2018, 19, 1255-1271.	0.7	81
18	Evaluation of the skill and added value of a reanalysisâ€driven regional simulation for Alpine temperature. International Journal of Climatology, 2010, 30, 760-773.	1.5	75

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19	Instrument- and Tree-Ring-Based Estimates of the Antarctic Oscillation. Journal of Climate, 2003, 16, 3511-3524.	1.2	71
20	One-Dimensional CCA and SVD, and Their Relationship to Regression Maps. Journal of Climate, 2005, 18, 2785-2792.	1.2	64
21	A combined statistical bias correction and stochastic downscaling method for precipitation. Hydrology and Earth System Sciences, 2017, 21, 1693-1719.	1.9	62
22	Comparison of GCMâ€•and RCMâ€simulated precipitation following stochastic postprocessing. Journal of Geophysical Research D: Atmospheres, 2014, 119, 11,040.	1.2	56
23	Transient simulations, empirical reconstructions and forcing mechanisms for the Mid-holocene hydrological climate in southern Patagonia. Climate Dynamics, 2007, 29, 333-355.	1.7	55
24	Stochastic Model Output Statistics for Bias Correcting and Downscaling Precipitation Including Extremes. Journal of Climate, 2014, 27, 6940-6959.	1.2	52
25	Statistical downscaling skill under present climate conditions: A synthesis of the VALUE perfect predictor experiment. International Journal of Climatology, 2019, 39, 3692-3703.	1.5	51
26	On-line and off-line data assimilation in palaeoclimatology: a case study. Climate of the Past, 2015, 11, 81-93.	1.3	49
27	The VALUE perfect predictor experiment: Evaluation of temporal variability. International Journal of Climatology, 2019, 39, 3786-3818.	1.5	47
28	Downscaling of GCM-Simulated Precipitation Using Model Output Statistics. Journal of Climate, 2014, 27, 312-324.	1.2	46
29	Evaluation of the performance of Euro-CORDEX Regional Climate Models for assessing hydrological climate change impacts in Great Britain: A comparison of different spatial resolutions and quantile mapping bias correction methods. Journal of Hydrology, 2020, 584, 124653.	2.3	43
30	The representation of location by a regional climate model in complex terrain. Hydrology and Earth System Sciences, 2015, 19, 3449-3456.	1.9	37
31	Cross-validation of bias-corrected climate simulations is misleading. Hydrology and Earth System Sciences, 2018, 22, 4867-4873.	1.9	34
32	Validation of spatial variability in downscaling results from the VALUE perfect predictor experiment. International Journal of Climatology, 2019, 39, 3819-3845.	1.5	27
33	Simulated Relationships between Regional Temperatures and Large-Scale Circulation: 125 kyr BP (Eemian) and the Preindustrial Period. Journal of Climate, 2005, 18, 4032-4045.	1.2	22
34	Overview of data assimilation methods. PAGES News, 2013, 21, 72-73.	0.1	17
35	Climate change scenarios at Austrian National Forest Inventory sites. Climate Research, 2002, 22, 161-173.	0.4	16
36	The Time Machine framework: monitoring and prediction of biodiversity loss. Trends in Ecology and Evolution, 2022, 37, 138-146.	4.2	13

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37	Assimilating continental mean temperatures to reconstruct the climate of the late pre-industrial period. Climate Dynamics, 2016, 46, 3547-3566.	1.7	11
38	Transient state estimation in paleoclimatology using data assimilation. PAGES News, 2013, 21, 74-75.	0.1	10
39	Sensitivity of temperature teleconnections to orbital changes in AO-GCM simulations. Geophysical Research Letters, 2006, 33, .	1.5	5
40	Delayed Holocene warming. Nature Geoscience, 2009, 2, 380-381.	5.4	5
41	Diving into the Past: A Paleo Dataâ€“Model Comparison Workshop on the Late Glacial and Holocene. Bulletin of the American Meteorological Society, 2019, 100, ES1-ES4.	1.7	5
42	Pacific <scp>SST</scp> influence on spring precipitation in Addis Ababa, Ethiopia. International Journal of Climatology, 2014, 34, 1223-1235.	1.5	4
43	Influence of proxy data uncertainty on data assimilation for the past climate. Climate of the Past, 2016, 12, 1555-1563.	1.3	4
44	40. Chronology and climate forcing of the last four interglacials. Developments in Quaternary Sciences, 2007, 7, 597-614.	0.1	2
45	34. Simulated teleconnections during the Eemian, the last glacial inception and the preindustrial period. Developments in Quaternary Sciences, 2007, 7, 517-526.	0.1	0