

# Douglas Maraun

## List of Publications by Year in descending order

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Version: 2024-02-01

70  
papers

8,075  
citations

81743

39  
h-index

95083

68  
g-index

76  
all docs

76  
docs citations

76  
times ranked

6839  
citing authors

#	ARTICLE	IF	CITATIONS
1	Precipitation downscaling under climate change: Recent developments to bridge the gap between dynamical models and the end user. <i>Reviews of Geophysics</i> , 2010, 48, .	9.0	1,256
2	A typology of compound weather and climate events. <i>Nature Reviews Earth &amp; Environment</i> , 2020, 1, 333-347.	12.2	536
3	Bias Correction, Quantile Mapping, and Downscaling: Revisiting the Inflation Issue. <i>Journal of Climate</i> , 2013, 26, 2137-2143.	1.2	493
4	Bias Correcting Climate Change Simulations - a Critical Review. <i>Current Climate Change Reports</i> , 2016, 2, 211-220.	2.8	484
5	Cross wavelet analysis: significance testing and pitfalls. <i>Nonlinear Processes in Geophysics</i> , 2004, 11, 505-514.	0.6	455
6	Towards process-informed bias correction of climate change simulations. <i>Nature Climate Change</i> , 2017, 7, 764-773.	8.1	329
7	Storylines: an alternative approach to representing uncertainty in physical aspects of climate change. <i>Climatic Change</i> , 2018, 151, 555-571.	1.7	317
8	Higher probability of compound flooding from precipitation and storm surge in Europe under anthropogenic climate change. <i>Science Advances</i> , 2019, 5, eaaw5531.	4.7	239
9	Regional climate downscaling over Europe: perspectives from the EURO-CORDEX community. <i>Regional Environmental Change</i> , 2020, 20, 1.	1.4	227
10	Nonstationarities of regional climate model biases in European seasonal mean temperature and precipitation sums. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	210
11	Multivariate statistical modelling of compound events via pair-copula constructions: analysis of floods in Ravenna (Italy). <i>Hydrology and Earth System Sciences</i> , 2017, 21, 2701-2723.	1.9	206
12	A first-of-its-kind multi-model convection permitting ensemble for investigating convective phenomena over Europe and the Mediterranean. <i>Climate Dynamics</i> , 2020, 55, 3-34.	1.7	176
13	Tempting long-memory - on the interpretation of DFA results. <i>Nonlinear Processes in Geophysics</i> , 2004, 11, 495-503.	0.6	167
14	<scp>VALUE</scp>: A framework to validate downscaling approaches for climate change studies. <i>Earth's Future</i> , 2015, 3, 1-14.	2.4	167
15	An intercomparison of a large ensemble of statistical downscaling methods over Europe: Results from the VALUE perfect predictor cross-validation experiment. <i>International Journal of Climatology</i> , 2019, 39, 3750-3785.	1.5	164
16	Nonstationary Gaussian processes in wavelet domain: Synthesis, estimation, and significance testing. <i>Physical Review E</i> , 2007, 75, 016707.	0.8	152
17	Characterisation of extreme winter precipitation in Mediterranean coastal sites and associated anomalous atmospheric circulation patterns. <i>Natural Hazards and Earth System Sciences</i> , 2010, 10, 1037-1050.	1.5	143
18	The first multi-model ensemble of regional climate simulations at kilometer-scale resolution, part I: evaluation of precipitation. <i>Climate Dynamics</i> , 2021, 57, 275-302.	1.7	114

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19	Crucial role of Black Sea warming in amplifying the 2012 Krymsk precipitation extreme. <i>Nature Geoscience</i> , 2015, 8, 615-619.	5.4	111
20	What drives high flow events in the Swiss Alps? Recent developments in wavelet spectral analysis and their application to hydrology. <i>Advances in Water Resources</i> , 2007, 30, 2511-2525.	1.7	106
21	Increased probability of compound long-duration dry and hot events in Europe during summer (1950–2013). <i>Environmental Research Letters</i> , 2019, 14, 094006.	2.2	103
22	When will trends in European mean and heavy daily precipitation emerge?. <i>Environmental Research Letters</i> , 2013, 8, 014004.	2.2	100
23	United Kingdom daily precipitation intensity: improved early data, error estimates and an update from 2000 to 2006. <i>International Journal of Climatology</i> , 2008, 28, 833-842.	1.5	94
24	Epochs of phase coherence between El Niño/Southern Oscillation and Indian monsoon. <i>Geophysical Research Letters</i> , 2005, 32, .	1.5	88
25	Soil Moisture Drought in Europe: A Compound Event of Precipitation and Potential Evapotranspiration on Multiple Time Scales. <i>Journal of Hydrometeorology</i> , 2018, 19, 1255-1271.	0.7	81
26	More meteorological events that drive compound coastal flooding are projected under climate change. <i>Communications Earth &amp; Environment</i> , 2020, 1, 47.	2.6	78
27	Rising Mediterranean Sea Surface Temperatures Amplify Extreme Summer Precipitation in Central Europe. <i>Scientific Reports</i> , 2016, 6, 32450.	1.6	72
28	Uncertainty in gridded precipitation products: Influence of station density, interpolation method and grid resolution. <i>International Journal of Climatology</i> , 2019, 39, 3717-3729.	1.5	71
29	Comparison of statistical downscaling methods with respect to extreme events over Europe: Validation results from the perfect predictor experiment of the COST Action VALUE. <i>International Journal of Climatology</i> , 2019, 39, 3846-3867.	1.5	64
30	A combined statistical bias correction and stochastic downscaling method for precipitation. <i>Hydrology and Earth System Sciences</i> , 2017, 21, 1693-1719.	1.9	62
31	Testing bias adjustment methods for regional climate change applications under observational uncertainty and resolution mismatch. <i>Atmospheric Science Letters</i> , 2020, 21, e978.	0.8	59
32	Comparison of GCM- and RCM-simulated precipitation following stochastic postprocessing. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 11,040.	1.2	56
33	Stochastic Model Output Statistics for Bias Correcting and Downscaling Precipitation Including Extremes. <i>Journal of Climate</i> , 2014, 27, 6940-6959.	1.2	52
34	The influence of synoptic airflow on UK daily precipitation extremes. Part I: Observed spatio-temporal relationships. <i>Climate Dynamics</i> , 2011, 36, 261-275.	1.7	51
35	Statistical downscaling skill under present climate conditions: A synthesis of the VALUE perfect predictor experiment. <i>International Journal of Climatology</i> , 2019, 39, 3692-3703.	1.5	51
36	The VALUE perfect predictor experiment: Evaluation of temporal variability. <i>International Journal of Climatology</i> , 2019, 39, 3786-3818.	1.5	47

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37	The annual cycle of heavy precipitation across the United Kingdom: a model based on extreme value statistics. <i>International Journal of Climatology</i> , 2009, 29, 1731-1744.	1.5	44
38	Modelling seasonality in extreme precipitation. <i>European Physical Journal: Special Topics</i> , 2009, 174, 99-111.	1.2	43
39	Synoptic airflow and UK daily precipitation extremes. <i>Extremes</i> , 2010, 13, 133-153.	0.5	42
40	Cosmic rays, carbon dioxide, and climate. <i>Eos</i> , 2004, 85, 38.	0.1	40
41	The representation of location by a regional climate model in complex terrain. <i>Hydrology and Earth System Sciences</i> , 2015, 19, 3449-3456.	1.9	37
42	The influence of synoptic airflow on UK daily precipitation extremes. Part II: regional climate model and E-OBS data validation. <i>Climate Dynamics</i> , 2012, 39, 287-301.	1.7	35
43	Evidence for added value of convection-permitting models for studying changes in extreme precipitation. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 12500-12513.	1.2	35
44	Cross-validation of bias-corrected climate simulations is misleading. <i>Hydrology and Earth System Sciences</i> , 2018, 22, 4867-4873.	1.9	34
45	Process-based evaluation of the VALUE perfect predictor experiment of statistical downscaling methods. <i>International Journal of Climatology</i> , 2019, 39, 3868-3893.	1.5	32
46	Extreme Precipitation in an Atmosphere General Circulation Model: Impact of Horizontal and Vertical Model Resolutions. <i>Journal of Climate</i> , 2015, 28, 1184-1205.	1.2	30
47	Improving Antarctic Total Ozone Projections by a Process-Oriented Multiple Diagnostic Ensemble Regression. <i>Journals of the Atmospheric Sciences</i> , 2013, 70, 3959-3976.	0.6	27
48	Validation of spatial variability in downscaling results from the VALUE perfect predictor experiment. <i>International Journal of Climatology</i> , 2019, 39, 3819-3845.	1.5	27
49	Event-Based Landslide Modeling in the Styrian Basin, Austria: Accounting for Time-Varying Rainfall and Land Cover. <i>Geosciences (Switzerland)</i> , 2020, 10, 217.	1.0	27
50	Challenges to link climate change data provision and user needs: Perspective from the COST action VALUE. <i>International Journal of Climatology</i> , 2019, 39, 3704-3716.	1.5	23
51	Adjusting climate model bias for agricultural impact assessment: How to cut the mustard. <i>Climate Services</i> , 2019, 13, 65-69.	1.0	22
52	A severe landslide event in the Alpine foreland under possible future climate and land-use changes. <i>Communications Earth &amp; Environment</i> , 2022, 3, .	2.6	22
53	How well do regional climate models simulate the spatial dependence of precipitation? An application of pair-copula constructions. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 2624-2646.	1.2	21
54	Emerging new climate extremes over Europe. <i>Climate Dynamics</i> , 2022, 58, 487-501.	1.7	20

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55	Climate projections for glacier change modelling over the Himalayas. <i>International Journal of Climatology</i> , 2020, 40, 1738-1754.	1.5	18
56	Dynamics in Complex Systems. <i>European Review</i> , 2009, 17, 357-370.	0.4	14
57	Regional Climate Model Biases, Their Dependence on Synoptic Circulation Biases and the Potential for Bias Adjustment: A Process-Oriented Evaluation of the Austrian Regional Climate Projections. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD032824.	1.2	14
58	Reply to "Comment on "Bias Correction, Quantile Mapping, and Downscaling: Revisiting the Inflation Issue". <i>Journal of Climate</i> , 2014, 27, 1821-1825.	1.2	11
59	Validation of the present day annual cycle in heavy precipitation over the British Islands simulated by 14 RCMs. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	10
60	How Hard is the Euro Area Core? An Evaluation of Growth Cycles Using Wavelet Analysis. <i>SSRN Electronic Journal</i> , 0, , .	0.4	10
61	A conceptual ENSO model under realistic noise forcing. <i>Nonlinear Processes in Geophysics</i> , 2006, 13, 275-285.	0.6	8
62	Downscaling of climate change scenarios for a high-resolution, site-specific assessment of drought stress risk for two viticultural regions with heterogeneous landscapes. <i>Earth System Dynamics</i> , 2022, 13, 911-934.	2.7	8
63	Stochastic downscaling of gridded precipitation to spatially coherent subgrid precipitation fields using a transformed Gaussian model. <i>International Journal of Climatology</i> , 2022, 42, 6126-6147.	1.5	7
64	IDENTIFICATION OF RATE CONSTANTS AND NONOBSERVABLE ABSORPTION SPECTRA IN NONLINEAR BIOCHEMICAL REACTION DYNAMICS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2004, 14, 2081-2092.	0.7	5
65	Compilation of a guideline providing comprehensive information on freely available climate change data and facilitating their efficient retrieval. <i>Climate Services</i> , 2020, 19, 100179.	1.0	5
66	Projected Change Models and Methodology. <i>Regional Climate Studies</i> , 2015, , 189-215.	1.2	5
67	Changes in the annual cycle of heavy precipitation across the British Isles within the 21st century. <i>Environmental Research Letters</i> , 2012, 7, 044029.	2.2	4
68	Reply [to "Cosmic rays, carbon dioxide, and climate"]. <i>Eos</i> , 2004, 85, 511-511.	0.1	3
69	Reply to "Comment on "Bias Correction, Quantile Mapping, and Downscaling: Revisiting the Inflation Issue". <i>Journal of Climate</i> , 2016, 29, 8669-8671.	1.2	2
70	Continuous wavelet spectral analysis of climate dynamics. <i>World Scientific Lecture Notes in Complex Systems</i> , 2007, , 325-346.	0.1	0