

Raj Mehrotra

List of Publications by Year in descending order

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Version: 2024-02-01

66
papers

2,672
citations

159585

30
h-index

189892

50
g-index

66
all docs

66
docs citations

66
times ranked

2542
citing authors

#	ARTICLE	IF	CITATIONS
1	Natural hazards in Australia: droughts. Climatic Change, 2016, 139, 37-54.	3.6	174
2	Quantification of precipitation and temperature uncertainties simulated by CMIP3 and CMIP5 models. Journal of Geophysical Research D: Atmospheres, 2016, 121, 3-17.	3.3	113
3	Estimation of the climate change impact on a catchment water balance using an ensemble of GCMs. Journal of Hydrology, 2018, 556, 1192-1204.	5.4	113
4	A comparison of three stochastic multi-site precipitation occurrence generators. Journal of Hydrology, 2006, 331, 280-292.	5.4	99
5	A comparison of multi-site daily rainfall downscaling techniques under Australian conditions. Journal of Hydrology, 2011, 408, 1-18.	5.4	99
6	Correcting for systematic biases in multiple raw GCM variables across a range of timescales. Journal of Hydrology, 2015, 520, 214-223.	5.4	97
7	A Multivariate Quantile-Matching Bias Correction Approach with Auto- and Cross-Dependence across Multiple Time Scales: Implications for Downscaling. Journal of Climate, 2016, 29, 3519-3539.	3.2	97
8	Development and Application of a Multisite Rainfall Stochastic Downscaling Framework for Climate Change Impact Assessment. Water Resources Research, 2010, 46, .	4.2	93
9	A semi-parametric model for stochastic generation of multi-site daily rainfall exhibiting low-frequency variability. Journal of Hydrology, 2007, 335, 180-193.	5.4	92
10	Development of a formal likelihood function for improved Bayesian inference of ephemeral catchments. Water Resources Research, 2010, 46, .	4.2	83
11	Conditional resampling of hydrologic time series using multiple predictor variables: A K-nearest neighbour approach. Advances in Water Resources, 2006, 29, 987-999.	3.8	76
12	An error estimation method for precipitation and temperature projections for future climates. Journal of Geophysical Research, 2012, 117, .	3.3	74
13	Impact of climate change on floods in the Brahmaputra basin using CMIP5 decadal predictions. Journal of Hydrology, 2015, 527, 281-291.	5.4	74
14	Preserving low-frequency variability in generated daily rainfall sequences. Journal of Hydrology, 2007, 345, 102-120.	5.4	71
15	A framework to quantify GCM uncertainties for use in impact assessment studies. Journal of Hydrology, 2014, 519, 1453-1465.	5.4	68
16	An information theoretic alternative to model a natural system using observational information alone. Water Resources Research, 2014, 50, 650-660.	4.2	63
17	A nonparametric nonhomogeneous hidden Markov model for downscaling of multisite daily rainfall occurrences. Journal of Geophysical Research, 2005, 110, .	3.3	62
18	Assessing Severe Drought and Wet Events over India in a Future Climate Using a Nested Bias-Correction Approach. Journal of Hydrologic Engineering - ASCE, 2013, 18, 760-772.	1.9	57

#	ARTICLE	IF	CITATIONS
19	Comparison of two approaches for downscaling synoptic atmospheric patterns to multisite precipitation occurrence. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	54
20	Continuous rainfall simulation: 1. A regionalized subdaily disaggregation approach. <i>Water Resources Research</i> , 2012, 48, .	4.2	53
21	A nonparametric stochastic downscaling framework for daily rainfall at multiple locations. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	51
22	Assessing future rainfall projections using multiple GCMs and a multi-site stochastic downscaling model. <i>Journal of Hydrology</i> , 2013, 488, 84-100.	5.4	50
23	Bayesian calibration and uncertainty analysis of hydrological models: A comparison of adaptive Metropolis and sequential Monte Carlo samplers. <i>Water Resources Research</i> , 2011, 47, .	4.2	49
24	An improved standardization procedure to remove systematic low frequency variability biases in GCM simulations. <i>Water Resources Research</i> , 2012, 48, .	4.2	49
25	Spatiotemporal variation of long-term drought propensity through reliability-resilience-vulnerability based <sc>D</sc>rought <sc>M</sc>anagement <sc>I</sc>ndex. <i>Water Resources Research</i> , 2014, 50, 7662-7676.	4.2	42
26	Correcting for systematic biases in GCM simulations in the frequency domain. <i>Journal of Hydrology</i> , 2016, 538, 117-126.	5.4	40
27	Evaluating spatio-temporal representations in daily rainfall sequences from three stochastic multi-site weather generation approaches. <i>Advances in Water Resources</i> , 2009, 32, 948-962.	3.8	39
28	Assessment of Climate Change Impacts on Reservoir Storage Reliability, Resilience, and Vulnerability Using a Multivariate Frequency Bias Correction Approach. <i>Water Resources Research</i> , 2020, 56, e2019WR026022.	4.2	38
29	Representing low-frequency variability in continuous rainfall simulations: A hierarchical random <sc>B</sc>artlett <sc>L</sc>ewis continuous rainfall generation model. <i>Water Resources Research</i> , 2015, 51, 9995-10007.	4.2	37
30	Water resources climate change projections using supervised nonlinear and multivariate soft computing techniques. <i>Journal of Hydrology</i> , 2016, 536, 119-132.	5.4	36
31	A software toolkit for correcting systematic biases in climate model simulations. <i>Environmental Modelling and Software</i> , 2018, 104, 130-152.	4.5	32
32	Continuous rainfall simulation: 2. A regionalized daily rainfall generation approach. <i>Water Resources Research</i> , 2012, 48, .	4.2	31
33	A Resampling Approach for Correcting Systematic Spatiotemporal Biases for Multiple Variables in a Changing Climate. <i>Water Resources Research</i> , 2019, 55, 754-770.	4.2	30
34	An assessment of CMIP5 multi-model decadal hindcasts over Australia from a hydrological viewpoint. <i>Journal of Hydrology</i> , 2014, 519, 2932-2951.	5.4	29
35	Consideration of Trends in Evaluating Inter-basin Water Transfer Alternatives within a Fuzzy Decision Making Framework. <i>Water Resources Management</i> , 2009, 23, 3207-3220.	3.9	27
36	Predicting cyanobacteria occurrence using climatological and environmental controls. <i>Water Research</i> , 2020, 175, 115639.	11.3	27

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37	A programming tool to generate multi-site daily rainfall using a two-stage semi parametric model. Environmental Modelling and Software, 2015, 63, 230-239.	4.5	23
38	Can the variability in precipitation simulations across GCMs be reduced through sensible bias correction?. Climate Dynamics, 2017, 49, 3257-3275.	3.8	22
39	Impacts of the tropical trans-basin variability on Australian rainfall. Climate Dynamics, 2017, 49, 1617-1629.	3.8	21
40	Rainfall generation. Geophysical Monograph Series, 2010, , 215-246.	0.1	19
41	An Assessment of Drift Correction Alternatives for CMIP5 Decadal Predictions. Journal of Geophysical Research D: Atmospheres, 2017, 122, 10,282.	3.3	19
42	Correcting systematic biases across multiple atmospheric variables in the frequency domain. Climate Dynamics, 2019, 52, 1283-1298.	3.8	19
43	A Network Approach for Delineating Homogeneous Regions in Regional Flood Frequency Analysis. Water Resources Research, 2020, 56, e2019WR025910.	4.2	19
44	Global Sea Surface Temperature Forecasts Using an Improved Multimodel Approach. Journal of Climate, 2014, 27, 3505-3515.	3.2	18
45	Does improved SSTA prediction ensure better seasonal rainfall forecasts?. Water Resources Research, 2015, 51, 3370-3383.	4.2	17
46	Global seasonal precipitation forecasts using improved sea surface temperature predictions. Journal of Geophysical Research D: Atmospheres, 2017, 122, 4773-4785.	3.3	16
47	Evaluation of downscaled daily rainfall hindcasts over Sydney, Australia using statistical and dynamical downscaling approaches. Hydrology Research, 2014, 45, 226-249.	2.7	14
48	Sampling biases in CMIP5 decadal forecasts. Journal of Geophysical Research D: Atmospheres, 2016, 121, 3435-3445.	3.3	12
49	Assessment of water and energy scarcity, security and sustainability into the future for the Three Gorges Reservoir using an ensemble of RCMs. Journal of Hydrology, 2020, 586, 124893.	5.4	12
50	Assessing GCM Convergence for India Using the Variable Convergence Score. Journal of Hydrologic Engineering - ASCE, 2014, 19, 1237-1246.	1.9	11
51	Effectiveness of CMIP5 Decadal Experiments for Interannual Rainfall Prediction Over Australia. Water Resources Research, 2019, 55, 7400-7418.	4.2	11
52	Characterising uncertainty in precipitation downscaling using a Bayesian approach. Advances in Water Resources, 2019, 129, 189-197.	3.8	11
53	Comparison of statistical downscaling techniques for multisite daily rainfall conditioned on atmospheric variables for the Sydney region. Australian Journal of Water Resources, 2009, 13, 1-15.	2.7	10
54	Impact of atmospheric moisture in a rainfall downscaling framework for catchmentâ€scale climate change impact assessment. International Journal of Climatology, 2011, 31, 431-450.	3.5	10

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55	Simulating rainfall time-series: how to account for statistical variability at multiple scales?. Stochastic Environmental Research and Risk Assessment, 2018, 32, 321-340.	4.0	10
56	On the predictability of SSTA indices from CMIP5 decadal experiments. Environmental Research Letters, 2015, 10, 074013.	5.2	9
57	Impact of bias-corrected reanalysis-derived lateral boundary conditions on WRF simulations. Journal of Advances in Modeling Earth Systems, 2017, 9, 1828-1846.	3.8	9
58	A robust alternative for correcting systematic biases in multi-variable climate model simulations. Environmental Modelling and Software, 2021, 139, 105019.	4.5	9
59	A Signal Processing Approach to Correct Systematic Bias in Trend and Variability in Climate Model Simulations. Geophysical Research Letters, 2021, 48, e2021GL092953.	4.0	9
60	Projected Changes in the Tibetan Plateau Snowpack Resulting From Rising Global Temperatures. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	9
61	Probabilistic forecasting of cyanobacterial concentration in riverine systems using environmental drivers. Journal of Hydrology, 2021, 593, 125626.	5.4	5
62	How reliable are standard indicators of stationarity?. Stochastic Environmental Research and Risk Assessment, 2007, 21, 765-771.	4.0	4
63	Using all data to improve seasonal sea surface temperature predictions: A combination-based model forecast with unequal observation lengths. International Journal of Climatology, 2018, 38, 3215-3223.	3.5	2
64	An Evaluation of Statistical Downscaling Techniques for Simulating Daily Rainfall Occurrences in the Upper Ping River Basin. Hydrology, 2020, 7, 63.	3.0	2
65	A New Framework for Modeling Future Hydrologic Extremes: Nested Bias Correction as a Precursor to Stochastic Rainfall Downscaling. , 2013, , 357-386.		1
66	Assessing Countermeasure Effectiveness in Controlling Cyanobacterial Exceedance in Riverine Systems Using Probabilistic Forecasting Alternatives. Journal of Water Resources Planning and Management - ASCE, 2021, 147, 04021062.	2.6	0