

Madhavan Nair Rajeevan

List of Publications by Year in descending order

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Version: 2024-02-01

135
papers

8,321
citations

76031

42
h-index

60403

85
g-index

136
all docs

136
docs citations

136
times ranked

6784
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced secondary aerosol formation driven by excess ammonia during fog episodes in Delhi, India. <i>Chemosphere</i> , 2022, 289, 133155.	4.2	19
2	Evaluation and Usefulness of Lightning Forecasts Made with Lightning Parameterization Schemes Coupled with the WRF Model. <i>Weather and Forecasting</i> , 2022, 37, 709-726.	0.5	6
3	Quantile mapping bias correction methods to IMDAA reanalysis for calibrating NCMRWF unified model operational forecasts. <i>Hydrological Sciences Journal</i> , 2022, 67, 870-885.	1.2	5
4	Precipitation variability over India during the 20th and 21st centuries: investigating natural and anthropogenic drivers. <i>Climatic Change</i> , 2022, 172, .	1.7	5
5	Improving simulation of the fog life cycle with high-resolution land data assimilation: A case study from WiFEX. <i>Atmospheric Research</i> , 2022, 278, 106331.	1.8	5
6	Performance of high resolution (400Åm) PM2.5 forecast over Delhi. <i>Scientific Reports</i> , 2021, 11, 4104.	1.6	37
7	IMDAA: High Resolution Satellite-era Reanalysis for the Indian Monsoon Region. <i>Journal of Climate</i> , 2021, , 1-78.	1.2	38
8	Unraveling the Mechanism of Extreme (More than 30 Sigma) Precipitation during August 2018 and 2019 over Kerala, India. <i>Weather and Forecasting</i> , 2021, 36, 1253-1273.	0.5	12
9	Evaluating different lightning parameterization schemes to simulate lightning flash counts over Maharashtra, India. <i>Atmospheric Research</i> , 2021, 255, 105532.	1.8	20
10	An assessment of long-term changes in mortalities due to extreme weather events in India: A study of 50Åyearsâ€™ data, 1970â€™2019. <i>Weather and Climate Extremes</i> , 2021, 32, 100315.	1.6	39
11	On the Conditions for Onset and Development of Fog Over New Delhi: An Observational Study from the WiFEX. <i>Pure and Applied Geophysics</i> , 2021, 178, 3727-3746.	0.8	12
12	Intriguing aspects of rainfall initiation over rainshadow region during boreal summer monsoon. <i>Atmospheric Research</i> , 2021, 261, 105746.	1.8	3
13	A Quantum Leap in Earth System Science Research and Services. <i>Resonance</i> , 2021, 26, 1417-1428.	0.2	0
14	Enhancing Accuracy of Air Quality and Temperature Forecasts During Paddy Crop Residue Burning Season in Delhi Via Chemical Data Assimilation. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD033019.	1.2	29
15	Characterization of atmospheric trace gases and water soluble inorganic chemical ions of PM1 and PM2.5 at Indira Gandhi International Airport, New Delhi during 2017â€™18 winter. <i>Science of the Total Environment</i> , 2020, 729, 138800.	3.9	24
16	Real-Time Forecast of Dense Fog Events over Delhi: The Performance of the WRF Model during the WiFEX Field Campaign. <i>Weather and Forecasting</i> , 2020, 35, 739-756.	0.5	18
17	A Novel Method for Interpolating Daily Station Rainfall Data Using a Stochastic Lattice Model. <i>Journal of Hydrometeorology</i> , 2020, 21, 909-933.	0.7	7
18	Observational aspects of tropical mesoscale convective systems over southeast India. <i>Journal of Earth System Science</i> , 2020, 129, 1.	0.6	9

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19	Introduction to Climate Change Over the Indian Region. , 2020, , 1-20.		26
20	Indian Ocean Warming. , 2020, , 191-206.		35
21	Precipitation Changes in India. , 2020, , 47-72.		40
22	Droughts and Floods. , 2020, , 117-141.		34
23	Evaluation of PM _{2.5} Forecast using Chemical Data Assimilation in the WRF-Chem Model: A Novel Initiative Under the Ministry of Earth Sciences Air Quality Early Warning System for Delhi, India. Current Science, 2020, 118, 1803.	0.4	20
24	Non-monsoonal precipitation response over the Western Himalayas to climate change. Climate Dynamics, 2019, 52, 4091-4109.	1.7	51
25	WRF model sensitivity to choice of PBL and microphysics parameterization for an advection fog event at Barkachha, rural site in the Indo-Gangetic basin, India. Theoretical and Applied Climatology, 2019, 136, 1099-1113.	1.3	25
26	Volatile organic compound measurements point to fog-induced biomass burning feedback to air quality in the megacity of Delhi. Science of the Total Environment, 2019, 689, 295-304.	3.9	27
27	Monsoon Mission: A Targeted Activity to Improve Monsoon Prediction across Scales. Bulletin of the American Meteorological Society, 2019, 100, 2509-2532.	1.7	64
28	Performance of a very high-resolution global forecast system model (GFS T1534) at 12.5 km over the Indian region during the 2016–2017 monsoon seasons. Journal of Earth System Science, 2019, 128, 1.	0.6	33
29	Future projections of heat waves over India from CMIP5 models. Climate Dynamics, 2019, 53, 975-988.	1.7	60
30	Characterization and source identification of PM _{2.5} and its chemical and carbonaceous constituents during Winter Fog Experiment 2015–16 at Indira Gandhi International Airport, Delhi. Science of the Total Environment, 2019, 662, 687-696.	3.9	34
31	Differences in CAPE between wet and dry spells of the monsoon over the southeastern peninsular India. Meteorology and Atmospheric Physics, 2019, 131, 657-668.	0.9	4
32	Two-Way Relationship between Aerosols and Fog: A Case Study at IGI Airport, New Delhi. Aerosol and Air Quality Research, 2019, 19, 71-79.	0.9	17
33	Role of enhanced synoptic activity and its interaction with intra-seasonal oscillations on the lower extended range prediction skill during 2015 monsoon season. Climate Dynamics, 2018, 51, 3435-3446.	1.7	11
34	Impact of different parameterization schemes on simulation of mesoscale convective system over south-east India. Meteorology and Atmospheric Physics, 2018, 130, 49-65.	0.9	20
35	Atmospheric water budget over the South Asian summer monsoon region. Meteorology and Atmospheric Physics, 2018, 130, 175-190.	0.9	3
36	Impact of Assimilation of Conventional and Satellite Radiance GTS Observations on Simulation of Mesoscale Convective System Over Southeast India Using WRF-3DVar. Pure and Applied Geophysics, 2018, 175, 479-500.	0.8	7

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37	High-resolution gridded soil moisture and soil temperature datasets for the Indian monsoon region. <i>Scientific Data</i> , 2018, 5, 180264.	2.4	27
38	Statistical Evidence for the Role of Southwestern Indian Ocean Heat Content in the Indian Summer Monsoon Rainfall. <i>Scientific Reports</i> , 2018, 8, 12092.	1.6	25
39	Oddâ€“Even Traffic Rule Implementation during Winter 2016 in Delhi Did Not Reduce Traffic Emissions of VOCs, Carbon Dioxide, Methane and Carbon Monoxide. <i>Current Science</i> , 2018, 114, 1318.	0.4	17
40	Tiruvalam Natarajan Krishnamurti (1932â€“2018). <i>Current Science</i> , 2018, 114, 1356.	0.4	0
41	Why Should India Invest in Deep Ocean Research?. <i>Current Science</i> , 2018, 115, 807.	0.4	1
42	A study on the role of land-atmosphere coupling on the south Asian monsoon climate variability using a regional climate model. <i>Theoretical and Applied Climatology</i> , 2017, 127, 949-964.	1.3	17
43	Past and future trends of hydroclimatic intensity over the Indian monsoon region. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 896-909.	1.2	29
44	Prediction of seasonal summer monsoon rainfall over homogenous regions of India using dynamical prediction system. <i>Journal of Hydrology</i> , 2017, 546, 103-112.	2.3	32
45	Improved prediction of severe thunderstorms over the Indian Monsoon region using high-resolution soil moisture and temperature initialization. <i>Scientific Reports</i> , 2017, 7, 41377.	1.6	43
46	Potential of collocated radiometer and wind profiler observations for monsoon studies. <i>Atmospheric Research</i> , 2017, 194, 17-26.	1.8	19
47	North Atlantic controls on wintertime warm extremes and aridification trends in the Middle East. <i>Scientific Reports</i> , 2017, 7, 12301.	1.6	15
48	A threefold rise in widespread extreme rain events over central India. <i>Nature Communications</i> , 2017, 8, 708.	5.8	393
49	Prediction skill of rainstorm events over India in the TIGGE weather prediction models. <i>Atmospheric Research</i> , 2017, 198, 194-204.	1.8	18
50	On increasing monsoon rainstorms over India. <i>Natural Hazards</i> , 2017, 85, 1743-1757.	1.6	23
51	How distinct are the two flavors of El Niño in retrospective forecasts of Climate Forecast System version 2 (CFSv2)?. <i>Climate Dynamics</i> , 2017, 48, 3829-3854.	1.7	25
52	Anomalous convective activity over sub-tropical east Pacific during 2015 and associated boreal summer monsoon teleconnections. <i>Climate Dynamics</i> , 2017, 48, 4081-4091.	1.7	14
53	State of the Climate in 2016. <i>Bulletin of the American Meteorological Society</i> , 2017, 98, Si-S280.	1.7	132
54	Performance of the Operational and Experimental Long-Range Forecasts for the 2015 Southwest Monsoon Rainfall. <i>Current Science</i> , 2017, 112, 68.	0.4	18

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55	Winter Fog Experiment Over the Indo-Gangetic Plains of India. <i>Current Science</i> , 2017, 112, 767.	0.4	87
56	Modulation of surface meteorological parameters by extratropical planetary-scale Rossby waves. <i>Annales Geophysicae</i> , 2016, 34, 123-132.	0.6	5
57	CMIP5 Projected Changes in the Annual Cycle of Indian Monsoon Rainfall. <i>Climate</i> , 2016, 4, 14.	1.2	48
58	Extremes in June rainfall during the Indian summer monsoons of 2013 and 2014: observational analysis and extended-range prediction. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2016, 142, 1276-1289.	1.0	10
59	Impact of high resolution land surface initialization in Indian summer monsoon simulation using a regional climate model. <i>Journal of Earth System Science</i> , 2016, 125, 677-689.	0.6	1
60	On the Variability and Increasing Trends of Heat Waves over India. <i>Scientific Reports</i> , 2016, 6, 26153.	1.6	212
61	Anatomy of Indian heatwaves. <i>Scientific Reports</i> , 2016, 6, 24395.	1.6	135
62	Heat content of the Arabian Sea Mini Warm Pool is increasing. <i>Atmospheric Science Letters</i> , 2016, 17, 39-42.	0.8	15
63	ENSO's far reaching connection to Indian cold waves. <i>Scientific Reports</i> , 2016, 6, 37657.	1.6	14
64	Possible shift in the ENSO-Indian monsoon rainfall relationship under future global warming. <i>Scientific Reports</i> , 2016, 6, 20145.	1.6	74
65	Precipitation climatology over India: validation with observations and reanalysis datasets and spatial trends. <i>Climate Dynamics</i> , 2016, 46, 541-556.	1.7	117
66	Relationship between ocean mean temperatures and Indian summer monsoon rainfall. <i>Atmospheric Science Letters</i> , 2015, 16, 408-413.	0.8	15
67	An Indian Ocean precursor for Indian summer monsoon rainfall variability. <i>Geophysical Research Letters</i> , 2015, 42, 9345-9354.	1.5	15
68	Analysing Predictability in Indian Monsoon Rainfall: A Data Analytic Approach. <i>Environmental Processes</i> , 2015, 2, 717-727.	1.7	21
69	Development and Evaluation of an Objective Criterion for the Real-Time Prediction of Indian Summer Monsoon Onset in a Coupled Model Framework. <i>Journal of Climate</i> , 2015, 28, 6234-6248.	1.2	18
70	Observed changes in southwest monsoon rainfall over India during 1901-2011. <i>International Journal of Climatology</i> , 2015, 35, 1881-1898.	1.5	128
71	Prediction of Indian rainfall during the summer monsoon season on the basis of links with equatorial Pacific and Indian Ocean climate indices. <i>Environmental Research Letters</i> , 2015, 10, 094004.	2.2	40
72	Statistical Selection of the Optimum Models in the CMIP5 Dataset for Climate Change Projections of Indian Monsoon Rainfall. <i>Climate</i> , 2015, 3, 858-875.	1.2	27

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73	Unprecedented hailstorms over north peninsular India during February–March 2014. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 2899-2912.	1.2	7
74	Rethinking Indian monsoon rainfall prediction in the context of recent global warming. <i>Nature Communications</i> , 2015, 6, 7154.	5.8	165
75	Improved Spread–Error Relationship and Probabilistic Prediction from the CFS-Based Grand Ensemble Prediction System. <i>Journal of Applied Meteorology and Climatology</i> , 2015, 54, 1569-1578.	0.6	34
76	Role of vertical structure of cloud microphysical properties on cloud radiative forcing over the Asian monsoon region. <i>Climate Dynamics</i> , 2015, 45, 3331-3345.	1.7	22
77	Analysis of the daily rainfall events over India using a new long period (1901–2010) high resolution (0.25°–0.25°) gridded rainfall data set. <i>Climate Dynamics</i> , 2015, 45, 755-776.	1.7	240
78	North Indian heavy rainfall event during June 2013: diagnostics and extended range prediction. <i>Climate Dynamics</i> , 2015, 44, 2049-2065.	1.7	85
79	High-resolution operational monsoon forecasts: an objective assessment. <i>Climate Dynamics</i> , 2015, 44, 3129-3140.	1.7	40
80	Examining pathways for modulation of Indian Summer Monsoon Rainfall by extratropical tropospheric temperature pattern. <i>International Journal of Climatology</i> , 2014, 34, 3732-3744.	1.5	7
81	Large scale features and assessment of spatial scale correspondence between TMPA and IMD rainfall datasets over Indian landmass. <i>Journal of Earth System Science</i> , 2013, 122, 573-588.	0.6	25
82	On the observed variability of monsoon droughts over India. <i>Weather and Climate Extremes</i> , 2013, 1, 42-50.	1.6	216
83	Diurnal variability of stability indices observed using radiosonde observations over a tropical station: Comparison with microwave radiometer measurements. <i>Atmospheric Research</i> , 2013, 124, 21-33.	1.8	61
84	Nowcasting severe convective activity over southeast India using ground-based microwave radiometer observations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 1-13.	1.2	208
85	A study of vertical cloud structure of the Indian summer monsoon using CloudSat data. <i>Climate Dynamics</i> , 2013, 40, 637-650.	1.7	97
86	On the Detection of Onset and Activity of the Indian Summer Monsoon Using GPS RO Refractivity Profiles. <i>Monthly Weather Review</i> , 2013, 141, 2096-2106.	0.5	6
87	Gridded daily Indian monsoon rainfall for 14 seasons: Merged TRMM and IMD gauge analyzed values. <i>Journal of Earth System Science</i> , 2013, 122, 1173-1182.	0.6	81
88	On the epochal variation of intensity of tropical cyclones in the Arabian Sea. <i>Atmospheric Science Letters</i> , 2013, 14, 249-255.	0.8	49
89	Identification and Validation of Homogeneous Rainfall Zones in India Using Correlation Analysis. <i>Journal of Hydrometeorology</i> , 2013, 14, 304-317.	0.7	28
90	State of the Climate in 2012. <i>Bulletin of the American Meteorological Society</i> , 2013, 94, S1-S258.	1.7	129

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91	Enhancement of inland penetration of monsoon depressions in the Bay of Bengal due to prestorm ground wetness. <i>Water Resources Research</i> , 2013, 49, 3589-3600.	1.7	16
92	Northeast monsoon over India: variability and prediction. <i>Meteorological Applications</i> , 2012, 19, 226-236.	0.9	145
93	Development of a perfect prognosis probabilistic model for prediction of lightning over south-east India. <i>Journal of Earth System Science</i> , 2012, 121, 355-371.	0.6	35
94	Characteristic features of winter precipitation and its variability over northwest India. <i>Journal of Earth System Science</i> , 2012, 121, 611-623.	0.6	70
95	Evaluation of the ENSEMBLES multi-model seasonal forecasts of Indian summer monsoon variability. <i>Climate Dynamics</i> , 2012, 38, 2257-2274.	1.7	137
96	Northeast monsoon rainfall variability over south peninsular India and its teleconnections. <i>Theoretical and Applied Climatology</i> , 2012, 108, 73-83.	1.3	53
97	Role of intra-seasonal oscillations in modulating Indian summer monsoon rainfall. <i>Climate Dynamics</i> , 2011, 36, 1005-1021.	1.7	36
98	Sub-daily variations observed in Tropical Easterly Jet (TEJ) streams. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2011, 73, 731-740.	0.6	7
99	State of the Climate in 2010. <i>Bulletin of the American Meteorological Society</i> , 2011, 92, S1-S236.	1.7	135
100	Intriguing Aspects of the Monsoon Low-Level Jet over Peninsular India Revealed by High-Resolution GPS Radiosonde Observations. <i>Journals of the Atmospheric Sciences</i> , 2011, 68, 1413-1423.	0.6	28
101	Active and break spells of the Indian summer monsoon. <i>Journal of Earth System Science</i> , 2010, 119, 229-247.	0.6	506
102	Variability of extreme rainfall events over India during southwest monsoon season. <i>Meteorological Applications</i> , 2010, 17, 88-104.	0.9	116
103	Sensitivity of WRF cloud microphysics to simulations of a severe thunderstorm event over Southeast India. <i>Annales Geophysicae</i> , 2010, 28, 603-619.	0.6	166
104	Climate change scenarios for Northwest India winter season. <i>Quaternary International</i> , 2010, 213, 12-19.	0.7	18
105	Study of Atmospheric Forcing and Responses (SAFAR) campaign: overview. <i>Annales Geophysicae</i> , 2010, 28, 89-101.	0.6	17
106	Daily Indian Precipitation Analysis Formed from a Merge of Rain-Gauge Data with the TRMM TMPA Satellite-Derived Rainfall Estimates. <i>Journal of the Meteorological Society of Japan</i> , 2009, 87A, 265-279.	0.7	178
107	Improving Global Model Precipitation Forecasts over India Using Downscaling and the FSU Superensemble. Part I: 1-5-Day Forecasts. <i>Monthly Weather Review</i> , 2009, 137, 2713-2735.	0.5	34
108	Out-of-phase relationships between convection over northwest India and warm pool region during the winter season. <i>International Journal of Climatology</i> , 2009, 29, 1330-1338.	1.5	20

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109	Development of a high resolution daily gridded temperature data set (1969–2005) for the Indian region. <i>Atmospheric Science Letters</i> , 2009, 10, 249-254.	0.8	401
110	Characteristics of the Tropical Easterly Jet: Long-term trends and their features during active and break monsoon phases. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	35
111	Increasing influence of ENSO and decreasing influence of AO/NAO in the recent decades over northwest India winter precipitation. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	105
112	Analysis of variations of cloud and aerosol properties associated with active and break spells of Indian summer monsoon using MODIS data. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	43
113	State of the Climate in 2008. <i>Bulletin of the American Meteorological Society</i> , 2009, 90, S1-S196.	1.7	74
114	The Indian monsoon. <i>Resonance</i> , 2008, 13, 1117-1132.	0.2	10
115	Trends in the rainfall pattern over India. <i>International Journal of Climatology</i> , 2008, 28, 1453-1469.	1.5	527
116	Analysis of variability and trends of extreme rainfall events over India using 104 years of gridded daily rainfall data. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	475
117	Inter-annual relationship between Atlantic sea surface temperature anomalies and Indian summer monsoon. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	39
118	Correction to "Analysis of variability and trends of extreme rainfall events over India using 104 years of gridded daily rainfall data". <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	23
119	On the El Niño-Indian monsoon predictive relationships. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	51
120	Northwest Pacific tropical cyclone activity and July rainfall over India. <i>Meteorology and Atmospheric Physics</i> , 2007, 95, 63-72.	0.9	15
121	Did unusual warming over the mid and higher latitudes play some role in causing the unprecedented failure of the southwest monsoon during July 2002?. <i>Meteorology and Atmospheric Physics</i> , 2007, 96, 193-201.	0.9	4
122	Role of Indian Ocean sea surface temperatures in modulating northwest Indian winter precipitation variability. <i>Theoretical and Applied Climatology</i> , 2007, 87, 73-83.	1.3	27
123	New statistical models for long-range forecasting of southwest monsoon rainfall over India. <i>Climate Dynamics</i> , 2007, 28, 813-828.	1.7	163
124	On the recent strengthening of the relationship between ENSO and northeast monsoon rainfall over South Asia. <i>Climate Dynamics</i> , 2007, 28, 649-660.	1.7	112
125	Sensitivity of surface radiation budget to clouds over the Asian monsoon region. <i>Journal of Earth System Science</i> , 2007, 116, 159-169.	0.6	16
126	Empirical prediction of Indian summer monsoon rainfall with different lead periods based on global SST anomalies. <i>Meteorology and Atmospheric Physics</i> , 2006, 92, 33-43.	0.9	25

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127	Sir Gilbert Thomas Walker. Resonance, 2006, 11, 3-5.	0.2	0
128	Tropical Pacific upper ocean heat content variations and Indian summer monsoon rainfall. Geophysical Research Letters, 2004, 31, .	1.5	56
129	Role of the ITCZ over the North Indian Ocean and Pre-Mei-Yu Front in Modulating July Rainfall over India. Journal of Climate, 2004, 17, 673-678.	1.2	10
130	Teleconnection of OLR and SST anomalies over Atlantic Ocean with Indian summer monsoon. Geophysical Research Letters, 2002, 29, 125-1-125-4.	1.5	39
131	Winter surface pressure anomalies over Eurasia and Indian summer monsoon. Geophysical Research Letters, 2002, 29, 94-1-94-4.	1.5	22
132	Net Cloud Radiative Forcing at the Top of the Atmosphere in the Asian Monsoon Region. Journal of Climate, 2000, 13, 650-657.	1.2	70
133	New Models for Long Range Forecasts of Summer Monsoon Rainfall over North West and Peninsular India. Meteorology and Atmospheric Physics, 2000, 73, 211-225.	0.9	48
134	Long Range Forecasting Indian Summer Monsoon Rainfall by a Hybrid Principal Component Neural Network Model. Meteorology and Atmospheric Physics, 1999, 71, 255-266.	0.9	43
135	Spatial and temporal relationships between global land surface air temperature anomalies and Indian summer monsoon rainfall. Meteorology and Atmospheric Physics, 1998, 66, 157-171.	0.9	42