Brian E Mapes

List of Publications by Year
in descending order

89 papers	5,863 citations	87888 38 h-index	74163 75 g-index
91 all docs	91 docs citations	91 times ranked	3374 citing authors

#	Article	IF	Citations
1	Tropical Intraseasonal Variability in 14 IPCC AR4 Climate Models. Part I: Convective Signals. Journal of Climate, 2006, 19, 2665-2690.	3.2	664
2	Multiscale Variability of Deep Convection In Realation to Large-Scale Circulation in TOGA COARE. Journals of the Atmospheric Sciences, 1996, 53, 1380-1409.	1.7	340
3	Gregarious Tropical Convection. Journals of the Atmospheric Sciences, 1993, 50, 2026-2037.	1.7	334
4	Convective Inhibition, Subgrid-Scale Triggering Energy, and Stratiform Instability in a Toy Tropical Wave Model. Journals of the Atmospheric Sciences, 2000, 57, 1515-1535.	1.7	330
5	Diabatic Divergence Profiles in Western Pacific Mesoscale Convective Systems. Journals of the Atmospheric Sciences, 1995, 52, 1807-1828.	1.7	312
6	The mesoscale convection life cycle: Building block or prototype for large-scale tropical waves?. Dynamics of Atmospheres and Oceans, 2006, 42, 3-29.	1.8	311
7	Diurnal Patterns of Rainfall in Northwestern South America. Part III: Diurnal Gravity Waves and Nocturnal Convection Offshore. Monthly Weather Review, 2003, 131, 830-844.	1.4	243
8	Stratiform Precipitation, Vertical Heating Profiles, and the Maddenâ€“Julian Oscillation. Journals of the Atmospheric Sciences, 2004, 61, 296-309.	1.7	210
9	Parameterizing Convective Organization to Escape the Entrainment Dilemma. Journal of Advances in Modeling Earth Systems, 2011, 3, n/a-n/a.	3.8	161
10	Diurnal Patterns of Rainfall in Northwestern South America. Part I: Observations and Context. Monthly Weather Review, 2003, 131, 799-812.	1.4	140
11	Clouds Associated with the Maddenâ€“Julian Oscillation: A New Perspective from CloudSat. Journals of the Atmospheric Sciences, 2011, 68, 3032-3051.	1.7	119
12	Subseasonal Variability Associated with Asian Summer Monsoon Simulated by 14 IPCC AR4 Coupled GCMs. Journal of Climate, 2008, 21, 4541-4567.	3.2	116
13	Bimodality in tropical water vapour. Quarterly Journal of the Royal Meteorological Society, 2003, 129, 2847-2866.	2.7	113
14	A Simple Atmospheric Model of the Local and Teleconnection Responses to Tropical Heating Anomalies. Journal of Climate, 2009, 22, 272-284.	3.2	111
15	Global energetics and local physics as drivers of past, present and future monsoons. Nature Geoscience, 2018, 11, 392-400.	12.9	100
16	Vertical-Mode and Cloud Decomposition of Large-Scale Convectively Coupled Gravity Waves in a Two-Dimensional Cloud-Resolving Model. Journals of the Atmospheric Sciences, 2007, 64, 1210-1229.	1.7	95
17	Influence of cloud-radiation interaction on simulating tropical intraseasonal oscillation with an atmospheric general circulation model. Journal of Geophysical Research, 2001, 106, 14219-14233.	3.3	94
18	An Integrated View of the 1987 Australian Monsoon and Its Mesoscale Convective Systems. I: Horizontal Structure. Quarterly Journal of the Royal Meteorological Society, 1992, 118, 927-963.	2.7	91

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19	Impacts of Cumulus Convection Parameterization on Aqua-planet AGCM Simulations of Tropical Intraseasonal Variability. Journal of the Meteorological Society of Japan, 2003, 81, 963-992.	1.8	86
20	Multiscale Convective Wave Disturbances in the Tropics: Insights from a Two-Dimensional Cloud-Resolving Model. Journals of the Atmospheric Sciences, 2008, 65, 140-155.	1.7	76
21	The climate response of the Indoâ€Pacific warm pool to glacial sea level. Paleoceanography, 2016, 31, 866-894.	3.0	76
22	Radiation Budget of the Tropical Intraseasonal Oscillation. Journals of the Atmospheric Sciences, 2004, 61, 2050-2062.	1.7	74
23	Water's two height scales: The moist adiabat and the radiative troposphere. Quarterly Journal of the Royal Meteorological Society, 2001, 127, 2353-2366.	2.7	72
24	Diurnal Patterns of Rainfall in Northwestern South America. Part II: Model Simulations. Monthly Weather Review, 2003, 131, 813-829.	1.4	70
25	Zonal Momentum Budget of the Maddenâ€“Julian Oscillation: The Source and Strength of Equivalent Linear Damping. Journals of the Atmospheric Sciences, 2005, 62, 2172-2188.	1.7	65
26	Transient Environmental Sensitivities of Explicitly Simulated Tropical Convection. Journals of the Atmospheric Sciences, 2010, 67, 923-940.	1.7	64
27	Vertical structure and physical processes of the Maddenâ€Julian oscillation: Linking hindcast fidelity to simulated diabatic heating and moistening. Journal of Geophysical Research D: Atmospheres, 2015, 120, 4690-4717.	3.3	63
28	Differences between More Divergent and More Rotational Types of Convectively Coupled Equatorial Waves. Part I: Spaceâ€“Time Spectral Analyses. Journals of the Atmospheric Sciences, 2012, 69, 3-16.	1.7	60
29	Characteristics of Cloud Size of Deep Convection Simulated by a Global Cloud Resolving Model over the Western Tropical Pacific. Journal of the Meteorological Society of Japan, 2008, 86A, 1-15.	1.8	59
30	Indian Monsoon Onset and the Americas Midsummer Drought: Out-of-Equilibrium Responses to Smooth Seasonal Forcing. Journal of Climate, 2005, 18, 1109-1115.	3.2	58
31	The Large-Scale Part of Tropical Mesoscale Convective System Circulations. Journal of the Meteorological Society of Japan, 1998, 76, 29-55.	1.8	55
32	Diagnosis of Tropical Biases and the MJO from Patterns in the MERRA Analysis Tendency Fields. Journal of Climate, 2012, 25, 6202-6214.	3.2	51
33	The tropical rain belts with an annual cycle and a continent model intercomparison project: TRACMIP. Journal of Advances in Modeling Earth Systems, 2016, 8, 1868-1891.	3.8	47
34	Composite Life Cycle of Maritime Tropical Mesoscale Convective Systems in Scatterometer and Microwave Satellite Observations. Journals of the Atmospheric Sciences, 2009, 66, 199-208.	1.7	46
35	Sampling Errors in Rawinsonde-Array Budgets. Journals of the Atmospheric Sciences, 2003, 60, 2697-2714.	1.7	44
36	Equilibrium Vs. Activation Control of Large-Scale Variations of Tropical Deep Convection. , 1997, , 321-358.		44

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37	Differences between More Divergent and More Rotational Types of Convectively Coupled Equatorial Waves. Part II: Composite Analysis based on Spaceâ€“Time Filtering. Journals of the Atmospheric Sciences, 2012, 69, 17-34.	1.7	41
38	Predictability Aspects of Global Aqua-planet Simulations with Explicit Convection. Journal of the Meteorological Society of Japan, 2008, 86A, 175-185.	1.8	40
39	Springtime ENSO phase evolution and its relation to rainfall in the continental U.S.. Geophysical Research Letters, 2014, 41, 1673-1680.	4.0	39
40	Idealized Simulations of the Intertropical Convergence Zone and Its Multilevel Flows. Journals of the Atmospheric Sciences, 2010, 67, 4028-4053.	1.7	35
41	Doppler Radar Observations of Mesoscale Wind Divergence in Regions of Tropical Convection. Monthly Weather Review, 2005, 133, 1808-1824.	1.4	34
42	North American Monsoon and Convectively Coupled Equatorial Waves Simulated by IPCC AR4 Coupled GCMs. Journal of Climate, 2008, 21, 2919-2937.	3.2	33
43	What Are the Sources of Mechanical Damping in Matsunoâ€“Gill-Type Models?. Journal of Climate, 2008, 21, 165-179.	3.2	32
44	Kerala floods in consecutive years - Its association with mesoscale cloudburst and structural changes in monsoon clouds over the west coast of India. Weather and Climate Extremes, 2021, 33, 100339.	4.1	31
45	NOTES AND CORRESPONDENCE Convective Eddy Momentum Tendencies in Long Cloud-Resolving Model Simulations. Journals of the Atmospheric Sciences, 2001, 58, 517-526.	1.7	30
46	The Interaction of Clouds and Dry Air in the Eastern Tropical Pacific. Journal of Climate, 2006, 19, 4531-4544.	3.2	29
47	A Lagrangian View of Moisture Dynamics during DYNAMO. Journals of the Atmospheric Sciences, 2016, 73, 1967-1985.	1.7	29
48	The Meandering Margin of the Meteorological Moist Tropics. Geophysical Research Letters, 2018, 45, 1177-1184.	4.0	29
49	Sensitivities of Cumulus-Ensemble Rainfall in a Cloud-Resolving Model with Parameterized Large-Scale Dynamics. Journals of the Atmospheric Sciences, 2004, 61, 2308-2317.	1.7	28
50	Unexpected peak near â^'15Â°C in CloudSat echo top climatology. Geophysical Research Letters, 2009, 36, .	4.0	28
51	Zonal mean wind, the Indian monsoon, and July drying in the western Atlantic subtropics. Journal of Geophysical Research, 2011, 116, .	3.3	26
52	An integrated view of the 1987 Australin monsoon and its mesoscale convective systems. II: Vertical structure. Quarterly Journal of the Royal Meteorological Society, 1993, 119, 733-754.	2.7	24
53	Spaceâ€“Time Spectral Analysis of the Moist Static Energy Budget Equation. Journal of Climate, 2019, 32, 501-529.	3.2	24
54	The skill of atmospheric linear inverse models in hindcasting the Maddenâ€“Julian Oscillation. Climate Dynamics, 2015, 44, 897-906.	3.8	22

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55	Characteristics of 3â€“4- and 6â€“8-Day Period Disturbances Observed over the Tropical Indian Ocean. Monthly Weather Review, 2010, 138, 4158-4174.	1.4	21
56	Cloud Vertical Structure Observed from Space and Ship over the Bay of Bengal and the Eastern Tropical Pacific. Journal of the Meteorological Society of Japan, 2008, 86A, 205-218.	1.8	19
57	Gregarious convection and radiative feedbacks in idealized worlds. Journal of Advances in Modeling Earth Systems, 2016, 8, 1029-1033.	3.8	19
58	Mesoscale Processes and Severe Convective Weather. , 2001, , 71-122.		19
59	The late spring Caribbean rainâ€belt: climatology and dynamics. International Journal of Climatology, 2017, 37, 4981-4993.	3.5	18
60	Wind shear effects on cloud-radiation feedback in the western Pacific warm pool. Geophysical Research Letters, 2004, 31, .	4.0	17
61	Effects of a Simple Convective Organization Scheme in a Twoâ€Plume <scp>GCM</scp>. Journal of Advances in Modeling Earth Systems, 2018, 10, 867-880.	3.8	17
62	Comparison of Cumulus Parameterizations and Entrainment Using Domain-Mean Wind Divergence in a Regional Model. Journals of the Atmospheric Sciences, 2004, 61, 1284-1295.	1.7	16
63	Predicting the influence of observations on mediumâ€range forecasts of atmospheric flow. Quarterly Journal of the Royal Meteorological Society, 2008, 134, 2011-2027.	2.7	16
64	Asian Monsoon Forcing of Subtropical Easterlies in the Community Atmosphere Model: Summer Climate Implications for the Western Atlantic. Journal of Climate, 2013, 26, 2741-2755.	3.2	16
65	Virtual Field Campaigns on Deep Tropical Convection in Climate Models. Journal of Climate, 2009, 22, 244-257.	3.2	15
66	Importance Profiles for Water Vapor. Surveys in Geophysics, 2017, 38, 1355-1369.	4.6	14
67	Relationships between Large Precipitating Systems and Atmospheric Factors at a Grid Scale. Journals of the Atmospheric Sciences, 2017, 74, 531-552.	1.7	14
68	Shape of Atlantic Tropical Cyclone Tracks and the Indian Monsoon. Geophysical Research Letters, 2018, 45, 10,746.	4.0	13
69	Differences between Faster versus Slower Components of Convectively Coupled Equatorial Waves. Journals of the Atmospheric Sciences, 2014, 71, 98-111.	1.7	11
70	Land Surface Heating and the North American Monsoon Anticyclone: Model Evaluation from Diurnal to Seasonal. Journal of Climate, 2010, 23, 4096-4106.	3.2	7
71	Mutual Adjustment of Mass Flux and Stratification Profiles. , 1997, , 399-411.		7
72	Convectively coupled Kelvin waves in aquachannel simulations: 2. Life cycle and dynamicalâ€convective coupling. Journal of Geophysical Research D: Atmospheres, 2016, 121, 11,319.	3.3	6

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73	The Risks of Contracting the Acquisition and Processing of the Nationâ€™s Weather and Climate Data to the Private Sector. Bulletin of the American Meteorological Society, 2018, 99, 869-870.	3.3	6
74	Asymptotic approaches to convective quasi-equilibrium. Quarterly Journal of the Royal Meteorological Society, 2000, 126, 1861-1887.	2.7	6
75	February Drying in Southeastern Brazil and the Australian Monsoon: Global Mechanism for a Regional Rainfall Feature. Journal of Climate, 2016, 29, 7529-7546.	3.2	5
76	Tangent linear superparameterization of convection in a 10 layer global atmosphere with calibrated climatology. Journal of Advances in Modeling Earth Systems, 2017, 9, 932-948.	3.8	5
77	A Mechanism for the Maintenance of Sharp Tropical Margins. Journals of the Atmospheric Sciences, 2019, 77, 1181-1197.	1.7	5
78	Interpretations of systematic errors in the NCEP Climate Forecast System at lead times of 2, 4, 8, ..., 256 days. Journal of Advances in Modeling Earth Systems, 2012, 4, .	3.8	4
79	Estimating Convectionâ€™s Moisture Sensitivity: An Observationâ€“Model Synthesis Using AMIE-DYNAMO Field Data. Journals of the Atmospheric Sciences, 2019, 76, 1505-1520.	1.7	4
80	Effect of Vertical Dipole Temperature Anomalies on Convection in a Cloud Model. Journals of the Atmospheric Sciences, 2004, 61, 2092-2100.	1.7	3
81	Distribution of cloudiness and categorization of rainfall types based on INSAT IR brightness temperatures over Indian subcontinent and adjoining oceanic region during south west monsoon season. Journal of Atmospheric and Solar-Terrestrial Physics, 2017, 161, 76-82.	1.6	3
82	Toward Form-Function Relationships for Mesoscale Structure in Convection. Journal of the Meteorological Society of Japan, 2021, 99, 847-878.	1.8	2
83	Importance Profiles for Water Vapor. Space Sciences Series of ISSI, 2017, , 183-197.	0.0	2
84	Cumulus Friction in the Asian Monsoon of a Global Model with 7 km Mesh. Springer Atmospheric Sciences, 2019, , 197-205.	0.3	2
85	Nonlinear Zonal Propagation of Organized Convection in the Tropics. Journals of the Atmospheric Sciences, 2019, 76, 2837-2867.	1.7	1
86	A Global Atlas of Tropical Precipitation Extremes. , 2019, , 1-13.		1
87	Evidence of Aggregation Dependence of 5-degree Scale Tropical Convective Evolution Using a Gross Moist Stability Framework. Journals of the Atmospheric Sciences, 2022, , .	1.7	1
88	Informativeness of wind data in linear Maddenâ€“Julian oscillation prediction. Atmospheric Science Letters, 2016, 17, 362-367.	1.9	0
89	Idealized simulations of the tropical climate and variability in the Single Column Atmosphere Model (SCAM). Part I: Radiativeâ€convective equilibrium. Journal of Advances in Modeling Earth Systems, 0, , .	3.8	0