Mitchell W Moncrieff

List of Publications by Year
in descending order

88 papers	4,029 citations	109321 35 h-index	123424 61 g-index
88 all docs	88 docs citations	88 times ranked	2138 citing authors

#	Article	IF	Citations
1	Organized Convective Systems: Archetypal Dynamical Models, Mass and Momentum Flux Theory, and Parametrization. Quarterly Journal of the Royal Meteorological Society, 1992, 118, 819-850.	2.7	222
2	Cloud-Resolving Modeling of Tropical Cloud Systems during Phase III of GATE. Part I: Two-Dimensional Experiments. Journals of the Atmospheric Sciences, 1996, 53, 3684-3709.	1.7	219
3	Cloud-Resolving Modeling of Cloud Systems during Phase III of GATE. Part II: Effects of Resolution and the Third Spatial Dimension. Journals of the Atmospheric Sciences, 1998, 55, 3264-3282.	1.7	189
4	The â€œYearâ€•of Tropical Convection (May 2008â€"April 2010): Climate Variability and Weather Highlights. Bulletin of the American Meteorological Society, 2012, 93, 1189-1218.	3.3	164
5	Cracking the MJO nut. Geophysical Research Letters, 2013, 40, 1223-1230.	4.0	154
6	Large-scale organization of tropical convection in two-dimensional explicit numerical simulations. Quarterly Journal of the Royal Meteorological Society, 2001, 127, 445-468.	2.7	137
7	Long-Term Behavior of Cloud Systems in TOGA COARE and Their Interactions with Radiative and Surface Processes. Part I: Two-Dimensional Modeling Study. Journals of the Atmospheric Sciences, 1998, 55, 2693-2714.	1.7	130
8	Organized convective systems in the tropical western pacific as a process in general circulation models: A toga coare case-study. Quarterly Journal of the Royal Meteorological Society, 1997, 123, 805-827.	2.7	127
9	Analytic Representation of the Large-Scale Organization of Tropical Convection. Journals of the Atmospheric Sciences, 2004, 61, 1521-1538.	1.7	118
10	Convection Initiation by Density Currents: Role of Convergence, Shear, and Dynamical Organization. Monthly Weather Review, 1999, 127, 2455-2464.	1.4	106
11	Multiscale Convective Organization and the YOTC Virtual Global Field Campaign. Bulletin of the American Meteorological Society, 2012, 93, 1171-1187.	3.3	105
12	GEWEX Cloud System Study (GCSS) Working Group 4: Precipitating Convective Cloud Systems. Bulletin of the American Meteorological Society, 1997, 78, 831-845.	3.3	97
13	A Numerical Study of the Diurnal Cycle of Tropical Oceanic Convection. Journals of the Atmospheric Sciences, 1998, 55, 2329-2344.	1.7	91
14	The Effect of Large-Scale Convergence on the Generation and Maintenance of Deep Moist Convection. Journals of the Atmospheric Sciences, 1988, 45, 3606-3624.	1.7	90
15	Orogenic Propagating Precipitation Systems over the United States in a Global Climate Model with Embedded Explicit Convection. Journals of the Atmospheric Sciences, 2011, 68, 1821-1840.	1.7	88
16	Long-Term Behavior of Cloud Systems in TOGA COARE and Their Interactions with Radiative and Surface Processes. Part II: Effects of Ice Microphysics on Cloudâ€"Radiation Interaction. Journals of the Atmospheric Sciences, 1999, 56, 3177-3195.	1.7	85
17	Simulation, Modeling, and Dynamically Based Parameterization of Organized Tropical Convection for Global Climate Models. Journals of the Atmospheric Sciences, 2017, 74, 1363-1380.	1.7	82
18	A Numerical Study of the Effects of Ambient Flow and Shear On Density Currents. Monthly Weather Review, 1996, 124, 2282-2303.	1.4	74

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19	Representing Convective Organization in Prediction Models by a Hybrid Strategy. Journals of the Atmospheric Sciences, 2006, 63, 3404-3420.	1.7	73
20	Multiscale cloud system modeling. Reviews of Geophysics, 2009, 47, .	23.0	73
21	Cloud Resolving Modeling of Tropical Circulations Driven by Large-Scale SST Gradients. Journals of the Atmospheric Sciences, 2000, 57, 2022-2040.	1.7	66
22	Cloud Resolving Modeling of Tropical Cloud Systems during Phase III of GATE. Part III: Effects of Cloud Microphysics. Journals of the Atmospheric Sciences, 1999, 56, 2384-2402.	1.7	63
23	The multiscale organization of moist convection and the intersection of weather and climate. Geophysical Monograph Series, 2010, , 3-26.	0.1	62
24	Momentum and Mass Transport by Convective Bands: Comparisons of Highly Idealized Dynamical Models to Observations. Journals of the Atmospheric Sciences, 1994, 51, 281-305.	1.7	62
25	Sensitivity of Cloud-Resolving Simulations of Warm-Season Convection to Cloud Microphysics Parameterizations. Monthly Weather Review, 2007, 135, 2854-2868.	1.4	61
26	Dynamical Influence of Microphysics in Tropical Squall Lines: A Numerical Study. Monthly Weather Review, 1997, 125, 2193-2210.	1.4	54
27	Meridional Momentum Flux and Superrotation in the Multiscale IPESD MJO Model. Journals of the Atmospheric Sciences, 2007, 64, 1636-1651.	1.7	51
28	Hierarchical Tropical Cloud Systems in an Analog Shallow-Water Model. Journals of the Atmospheric Sciences, 1995, 52, 1723-1742.	1.7	50
29	Role of the atmospheric mean state on the initiation of the Madden-Julian oscillation in a tropical channel model. Climate Dynamics, 2011, 36, 161-184.	3.8	49
30	A comparison of explicit and implicit predictions of convective and stratiform precipitating weather systems with a mesoâ€Î²â€scale numerical model. Quarterly Journal of the Royal Meteorological Society, 1988, 114, 31-60.	2.7	43
31	Effects of Convectively Generated Gravity Waves and Rotation on the Organization of Convection. Journals of the Atmospheric Sciences, 2004, 61, 2218-2227.	1.7	43
32	Stratospheric Gravity Waves Generated by Multiscale Tropical Convection. Journals of the Atmospheric Sciences, 2008, 65, 2598-2614.	1.7	42
33	Convective Momentum Transport by Rainbands within a Maddenâ€"Julian Oscillation in a Global Nonhydrostatic Model with Explicit Deep Convective Processes. Part I: Methodology and General Results. Journals of the Atmospheric Sciences, 2012, 69, 1317-1338.	1.7	42
34	Long-term behaviour of precipitating tropical cloud systems: A numerical study. Quarterly Journal of the Royal Meteorological Society, 1996, 122, 1019-1042.	2.7	41
35	Collective Effects of Organized Convection and Their Approximation in General Circulation Models. Journals of the Atmospheric Sciences, 1996, 53, 1477-1495.	1.7	39
36	Long-Term Behavior of Cloud Systems in TOGA COARE and Their Interactions with Radiative and Surface Processes. Part III: Effects on the Energy Budget and SST. Journals of the Atmospheric Sciences, 2001, 58, 1155-1168.	1.7	36

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37	Characterization of Momentum Transport Associated with Organized Moist Convection and Gravity Waves. Journals of the Atmospheric Sciences, 2010, 67, 3208-3225.	1.7	36
38	Simulated Density Currents in Idealized Stratified Environments. Monthly Weather Review, 2000, 128, 1420-1437.	1.4	33
39	Large-scale organization of tropical convection in two-dimensional explicit numerical simulations: Effects of interactive radiation. Quarterly Journal of the Royal Meteorological Society, 2002, 128, 2349-2375.	2.7	32
40	A Three-Dimensional Numerical Study of an Oklahoma Squall Line Containing Right-Flank Supercells. Journals of the Atmospheric Sciences, 1989, 46, 3363-3391.	1.7	31
41	Toward a Dynamical Foundation for Organized Convection Parameterization in GCMs. Geophysical Research Letters, 2019, 46, 14103-14108.	4.0	31
42	Explicit and Parameterized Realizations of Convective Cloud Systems in TOGA COARE. Monthly Weather Review, 2001, 129, 1689-1703.	1.4	29
43	Explicit and parameterized episodes of warm-season precipitation over the continental United States. Advances in Atmospheric Sciences, 2006, 23, 91-105.	4.3	29
44	Organized Convection Parameterization for the ITCZ*. Journals of the Atmospheric Sciences, 2015, 72, 3073-3096.	1.7	28
45	Linear stability and single-column analyses of several cumulus parametrization categories in a shallow-water model. Quarterly Journal of the Royal Meteorological Society, 1998, 124, 983-1005.	2.7	27
46	Wavelet Analysis of Simulated Tropical Convective Cloud Systems. Part I: Basic Analysis. Journals of the Atmospheric Sciences, 2001, 58, 850-867.	1.7	24
47	Hierarchical modelling of tropical convective systems using explicit and parametrized approaches. Quarterly Journal of the Royal Meteorological Society, 2001, 127, 493-515.	2.7	24
48	Role of topography on the MJO in the maritime continent: a numerical case study. Climate Dynamics, 2020, 55, 295-314.	3.8	24
49	Long-Lived Mesoscale Systems in a Lowâ€“Convective Inhibition Environment. Part I: Upshear Propagation. Journals of the Atmospheric Sciences, 2015, 72, 4297-4318.	1.7	23
50	Effects of sea surface temperature and large-scale dynamics on the thermodynamic equilibrium state and convection over the tropical western Pacific. Journal of Geophysical Research, 1999, 104, 6093-6100.	3.3	22
51	Cumulus Ensembles in Shear: Implications for Parameterization. Journals of the Atmospheric Sciences, 2001, 58, 2832-2842.	1.7	22
52	A note on propagating rainfall episodes over the Bay of Bengal. Quarterly Journal of the Royal Meteorological Society, 2008, 134, 787-792.	2.7	22
53	Wavelet Analysis of Simulated Tropical Convective Cloud Systems. Part II: Decomposition of Convective-Scale and Mesoscale Structure. Journals of the Atmospheric Sciences, 2001, 58, 868-876.	1.7	20
54	Multiscale Temporal Variability of Warm-Season Precipitation over North America: Statistical Analysis of Radar Measurements. Journals of the Atmospheric Sciences, 2006, 63, 2355-2368.	1.7	18

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55	Upscale Impact of Mesoscale Convective Systems and Its Parameterization in an Idealized GCM for an MJO Analog above the Equator. Journals of the Atmospheric Sciences, 2019, 76, 865-892.	1.7	17
56	A comparison of explicit and implicit predictions of convective and stratiform precipitating weather systems with a meso-<I>Î²</I>-scale numericalmodel. Quarterly Journal of the Royal Meteorological Society, 1988, 114, 31-60.	2.7	17
57	An Analytical Study of Density Currents in Sheared, Stratified Fluids Including the Effects of Latent Heating. Journals of the Atmospheric Sciences, 1996, 53, 3303-3312.	1.7	16
58	Mean-State Convective Circulations over Large-Scale Tropical SST Gradients. Journals of the Atmospheric Sciences, 2002, 59, 1578-1592.	1.7	16
59	Shear-Parallel Mesoscale Convective Systems in a Moist Low-Inhibition Mei-Yu Front Environment. Journals of the Atmospheric Sciences, 2017, 74, 4213-4228.	1.7	16
60	Mesoscale Momentum Budget in a Midlatitude Squall Line: A Numerical Case Study. Monthly Weather Review, 1990, 118, 1011-1028.	1.4	15
61	Evaluation of Large-Scale Forcing during TOGA COARE for Cloud-Resolving Models and Single-Column Models. Journals of the Atmospheric Sciences, 2000, 57, 2977-2985.	1.7	14
62	Long-Lived Mesoscale Systems in a Lowâ€“Convective Inhibition Environment. Part II: Downshear Propagation. Journals of the Atmospheric Sciences, 2015, 72, 4319-4336.	1.7	14
63	A Momentum Budget Analysis of Westerly Wind Events Associated with the Maddenâ€“Julian Oscillation during DYNAMO. Journals of the Atmospheric Sciences, 2015, 72, 3780-3799.	1.7	13
64	Analytical Models of Narrow Cold-Frontal Rainbands and Related Phenomena. Journals of the Atmospheric Sciences, 1989, 46, 150-162.	1.7	12
65	Fractality in Idealized Simulations of Large-Scale Tropical Cloud Systems. Monthly Weather Review, 1996, 124, 838-848.	1.4	12
66	Simulation of intense organized convective precipitation observed during the Arabian Sea Monsoon Experiment (ARMEX). Journal of Geophysical Research, 2007, 112, .	3.3	12
67	Explicitly simulated tropical convection over idealized warm pools. Journal of Geophysical Research, 2008, 113, .	3.3	12
68	Shearâ€Parallel Tropical Convective Systems: Importance of Cold Pools and Wind Shear. Geophysical Research Letters, 2020, 47, e2020GL087720.	4.0	12
69	Parameterization of Convective Momentum Transport in Highly Baroclinic Conditions. Journals of the Atmospheric Sciences, 2000, 57, 3035-3049.	1.7	11
70	A Systemic Analysis of Multiscale Deep Convective Variability over the Tropical Pacific. Journal of Climate, 2004, 17, 2736-2751.	3.2	11
71	Progress and direction in tropical convection research: YOTC International Science Symposium. Bulletin of the American Meteorological Society, 2012, 93, ES65-ES69.	3.3	10
72	Insights into convective momentum transport and its parametrization from idealized simulations of organized convection. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 2687-2702.	2.7	10

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73	Numerical Archetypal Parameterization for Mesoscale Convective Systems. Journals of the Atmospheric Sciences, 2016, 73, 2585-2602.	1.7	9
74	Walker-Type Mean Circulations and Convectively Coupled Tropical Waves as an Interacting System. Journals of the Atmospheric Sciences, 2002, 59, 1566-1577.	1.7	8
75	Explicit Simulations of the Intertropical Convergence Zone. Journals of the Atmospheric Sciences, 2004, 61, 458-473.	1.7	8
76	Explicit Convection over the Western Pacific Warm Pool in the Community Atmospheric Model. Journal of Climate, 2005, 18, 1482-1502.	3.2	8
77	Systematic Patterns in Land Precipitation Due to Convection in Neighboring Islands in the Maritime Continent During MJO Propagation. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033465.	3.3	8
78	Mass and Momentum Transports by Organized Convection: Effects of Shear and Buoyancy. Journals of the Atmospheric Sciences, 1996, 53, 964-979.	1.7	7
79	Sensitivity of Single-Column Model Solutions to Convective Parameterizations and Initial Conditions. Journal of Climate, 2001, 14, 2563-2582.	3.2	7
80	Convective Momentum Transport Associated with the Maddenâ€"Julian Oscillation Based on a Reanalysis Dataset. Journal of Climate, 2015, 28, 5763-5782.	3.2	6
81	Momentum Transport by Organized Convection. , 1997, , 231-253.		6
82	Impact of Mesoscale Momentum Transport on Large-Scale Tropical Dynamics: Linear Analysis of the Shallow-Water Analog. Journals of the Atmospheric Sciences, 1998, 55, 1038-1050.	1.7	5
83	Multicell stage of the Munich storm of 12 July 1984: a numerical study. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 44, 339.	1.7	4
84	Quasi-stationary extreme rain produced by mesoscale convective system on the Mei-Yu front. Meteorology and Atmospheric Physics, 2020, 132, 721-742.	2.0	4
85	Convective Organization in Evolving Large-Scale Forcing Represented by a Highly Truncated Numerical Archetype. Journals of the Atmospheric Sciences, 2018, 75, 2827-2847.	1.7	2
86	Effects of Dimensionality on Simulated Large-Scale Convective Organization and Coupled Waves. Journal of the Meteorological Society of Japan, 2012, 90, 59-78.	1.8	2
87	Comparison of two land surface schemes in week-long cloud-system-resolving simulations of warm season precipitation. Meteorology and Atmospheric Physics, 2010, 107, 9-15.	2.0	1
88	Improved Simulation of Midlatitude Climate in a New Channel Model Compared to Contemporary Global Climate Models. Geophysical Research Letters, 2021, 48, e2021GL093297.	4.0	1