Michael J Reeder

List of Publications by Year
in descending order

108 papers	3,073 citations	147801 31 h-index	189892 50 g-index
111 all docs	111 docs citations	111 times ranked	2474 citing authors

#	Article	IF	Citations
1	Numerical Modeling of Gravity Wave Generation by Deep Tropical Convection. Journals of the Atmospheric Sciences, 2001, 58, 1249-1274.	1.7	211
2	Inertiaâ€“Gravity Waves Observed in the Lower Stratosphere over Macquarie Island. Journals of the Atmospheric Sciences, 2000, 57, 737-752.	1.7	140
3	A global climatology of atmospheric fronts. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	137
4	A Generalization of Petterssen's Frontogenesis Function and Its Relation to the Forcing of Vertical Motion. Monthly Weather Review, 1988, 116, 762-781.	1.4	136
5	On the Movement and Low-Level Structure of Cold Fronts. Monthly Weather Review, 1988, 116, 1927-1944.	1.4	108
6	Local partitioning of the overturning circulation in the tropics and the connection to the Hadley and Walker circulations. Journal of Geophysical Research D: Atmospheres, 2014, 119, 1322-1339.	3.3	99
7	Regimes of the North Australian Wet Season. Journal of Climate, 2009, 22, 6699-6715.	3.2	79
8	Objective Identification of the Intertropical Convergence Zone: Climatology and Trends from the ERA-Interim. Journal of Climate, 2014, 27, 1894-1909.	3.2	79
9	Sea-Breeze Dynamics and Convection Initiation: The Influence of Convective Parameterization in Weather and Climate Model Biases. Journal of Climate, 2015, 28, 8093-8108.	3.2	78
10	The Structure and Evolution of Heat Waves in Southeastern Australia. Journal of Climate, 2014, 27, 5768-5785.	3.2	75
11	Gravity wave activity associated with tropical convection detected in TOGA COARE Sounding data. Geophysical Research Letters, 1996, 23, 261-264.	4.0	72
12	Convectively Generated Gravity Waves and Their Effect on the Cloud Environment. Journals of the Atmospheric Sciences, 2001, 58, 2427-2440.	1.7	68
13	Central Australian Cold Fronts. Monthly Weather Review, 1995, 123, 16-38.	1.4	68
14	Severe convective storms initiated by intense wildfires: Numerical simulations of pyroâ€convection and pyroâ€tornadogenesis. Geophysical Research Letters, 2009, 36, .	4.0	58
15	The meteorology of Black Saturday. Quarterly Journal of the Royal Meteorological Society, 2013, 139, 585-599.	2.7	54
16	Innerâ€core vacillation cycles during the intensification of Hurricane Katrina. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 829-844.	2.7	53
17	The influence of tropical cyclones on heat waves in Southeastern Australia. Geophysical Research Letters, 2013, 40, 6264-6270.	4.0	53
18	Modes of climate variability and heat waves in Victoria, southeastern Australia. Geophysical Research Letters, 2014, 41, 6926-6934.	4.0	48

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19	Rainfall Changes over Southwestern Australia and Their Relationship to the Southern Annular Mode and ENSO. Journal of Climate, 2014, 27, 5801-5814.	3.2	44
20	Trends in the local Hadley and local Walker circulations. Journal of Geophysical Research D: Atmospheres, 2015, 120, 7599-7618.	3.3	42
21	Observations and numerical modelling of mountain waves over the Southern Alps of New Zealand. Quarterly Journal of the Royal Meteorological Society, 2000, 126, 2765-2788.	2.7	41
22	Southeastern Australian Heat Waves from a Trajectory Viewpoint. Monthly Weather Review, 2017, 145, 4109-4125.	1.4	40
23	Recent global trends in atmospheric fronts. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	39
24	Physical Mechanisms Regulating Summertime Rainfall over Northwestern Australia. Journal of Climate, 2011, 24, 3705-3717.	3.2	37
25	Coherent Synoptic Disturbances in the Australian Monsoon. Journal of Climate, 2012, 25, 8409-8421.	3.2	37
26	The Generation of the Morning Glory. Journals of the Atmospheric Sciences, 2004, 61, 1360-1376.	1.7	36
27	Convective Systems of the North Australian Monsoon. Journal of Climate, 2008, 21, 5091-5112.	3.2	36
28	Stratospheric inertiaâ€“gravity waves generated in a numerical model of frontogenesis. II: Wave sources, generation mechanisms and momentum fluxes. Quarterly Journal of the Royal Meteorological Society, 1996, 122, 1175-1195.	2.7	34
29	Rossby waves, extreme fronts, and wildfires in southeastern Australia. Geophysical Research Letters, 2015, 42, 2015-2023.	4.0	34
30	The effects of convection and baroclinicity on the motion of tropical-cyclone-like vortices. Quarterly Journal of the Royal Meteorological Society, 1997, 123, 699-725.	2.7	33
31	The characteristics of seasonalâ€scale droughts in Australia, 1911â€“2009. International Journal of Climatology, 2013, 33, 1658-1672.	3.5	33
32	The Dynamics of Australian Monsoon Bursts. Journals of the Atmospheric Sciences, 2016, 73, 55-69.	1.7	32
33	Balanced and Unbalanced Upper-Level Frontogenesis. Journals of the Atmospheric Sciences, 1988, 45, 3366-3386.	1.7	29
34	The Diurnal and Seasonal Variation of the Northern Australian Dryline. Monthly Weather Review, 2007, 135, 2995-3008.	1.4	29
35	Mesoscale Meteorology. , 1998, , 201-241.		29
36	A Study of Frontal Dynamics with Application to the Australian Summertime â€œCool Changeâ€• Journals of the Atmospheric Sciences, 1987, 44, 687-705.	1.7	27

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37	Stratospheric inertiaâ€“gravity waves generated in a numerical model of frontogenesis. I: Model solutions. Quarterly Journal of the Royal Meteorological Society, 1996, 122, 1153-1174.	2.7	27
38	The three-dimensional distribution of clouds around Southern Hemisphere extratropical cyclones. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	27
39	â€œMorning-Gloryâ€•Disturbances and the Environment in which They Propagate. Journals of the Atmospheric Sciences, 1997, 54, 1712-1725.	1.7	25
40	Radiosonde observations of partially trapped lee waves over Tasmania, Australia. Journal of Geophysical Research, 1999, 104, 16719-16727.	3.3	25
41	Modelling the generation of gravity waves by a maritime continent thunderstorm. Quarterly Journal of the Royal Meteorological Society, 2001, 127, 2705-2724.	2.7	25
42	Extratropicalâ€“Tropical Interaction during Onset of the Australian Monsoon: Reanalysis Diagnostics and Idealized Dry Simulations. Journals of the Atmospheric Sciences, 2007, 64, 3475-3498.	1.7	25
43	Observations of a cut-off low over southern Australia. Quarterly Journal of the Royal Meteorological Society, 1998, 124, 1109-1132.	2.7	23
44	The Connection between the Southern Annular Mode and a Feature-Based Perspective on Southern Hemisphere Midlatitude Winter Variability. Journal of Climate, 2020, 33, 115-129.	3.2	22
45	Convectively generated gravity waves observed from radiosonde data taken during MCTEX. Quarterly Journal of the Royal Meteorological Society, 2003, 129, 1731-1740.	2.7	21
46	The dynamics of heat lows in simple background flows. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 3147-3165.	2.7	21
47	Precipitation Associated with Convergence Lines. Journal of Climate, 2017, 30, 3169-3183.	3.2	21
48	A numerical study of barotropic vortex motion near a large-scale mountain range with application to the motion of tropical cyclones approaching the Sierra Madre. Meteorology and Atmospheric Physics, 1997, 64, 1-19.	2.0	20
49	Stratospheric inertia-gravity waves generated in a numerical model of frontogenesis. II: Wave sources, generation mechanisms and momentum fluxes. Quarterly Journal of the Royal Meteorological Society, 1996, 122, 1175-1195.	2.7	20
50	Numerical simulations of grassland fires in the Northern Territory, Australia: A new subgrid-scale fire parameterization. Journal of Geophysical Research, 2003, 108, .	3.3	19
51	A Midlatitude Influence on Australian Monsoon Bursts. Journal of Climate, 2017, 30, 5377-5393.	3.2	19
52	Rainfall regimes over northwestern Australia. Quarterly Journal of the Royal Meteorological Society, 2018, 144, 458-467.	2.7	19
53	Objective Classification of Tropical Mesoscale Convective Systems. Journal of Climate, 2009, 22, 5797-5808.	3.2	18
54	The diurnal evolution of cold fronts in the Australian subtropics. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 395-411.	2.7	18

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55	Southern Hemisphere summertime Rossby waves and weather in the Australian region. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 2374-2388.	2.7	18
56	Synoptic climatology of hybrid cyclones in the Australian region. Quarterly Journal of the Royal Meteorological Society, 2019, 145, 288-302.	2.7	18
57	A weather system perspective on winterâ€“spring rainfall variability in southeastern Australia during ElÂNiÃ±o. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 2614-2633.	2.7	17
58	The Detection of Flow Asymmetries in the Tropical Cyclone Environment. Monthly Weather Review, 1991, 119, 848-855.	1.4	15
59	Interacting â€œMorning Gloriesâ€•over Northern Australia. Bulletin of the American Meteorological Society, 1995, 76, 1165-1171.	3.3	15
60	Coupled Atmosphereâ€Fire Simulations of the Black Saturday Kilmore East Wildfires With the Unified Model. Journal of Advances in Modeling Earth Systems, 2019, 11, 210-230.	3.8	15
61	Stratospheric inertia-gravity waves generated in a numerical model of frontogenesis. I: Model solutions. Quarterly Journal of the Royal Meteorological Society, 1996, 122, 1153-1174.	2.7	15
62	Summertime precipitation over northern Australia in AMIP simulations from CMIP5. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 1753-1768.	2.7	14
63	A Multiplicative Cascade Model for Highâ€Resolution Spaceâ€Time Downscaling of Rainfall. Journal of Geophysical Research D: Atmospheres, 2018, 123, 2050-2067.	3.3	14
64	The effect of the continental boundary layer on the dynamics of fronts in a 2D model of baroclinic instability. II: Surface heating and cooling. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 2409-2429.	2.7	13
65	Low-Level Convergence Lines over Northeastern Australia. Part I: The North Australian Cloud Line. Monthly Weather Review, 2006, 134, 3092-3108.	1.4	13
66	Low-Level Convergence Lines over Northeastern Australia. Part II: Southerly Disturbances. Monthly Weather Review, 2006, 134, 3109-3124.	1.4	13
67	The effect of the continental boundary layer on the dynamics of fronts in a 2D model of baroclinic instability. I: An insulated lower surface. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 2389-2408.	2.7	12
68	Idealized modelling of landfalling cold fronts. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 2147-2161.	2.7	12
69	The roles of diurnal forcing and largeâ€scale moisture transport for initiating rain over northwest Australia in a GCM. Quarterly Journal of the Royal Meteorological Society, 2014, 140, 2515-2526.	2.7	12
70	A comparison between frontogenesis in the two-dimensional Eady model of baroclinic instability and summertime cold fronts in the Australian region. Quarterly Journal of the Royal Meteorological Society, 1986, 112, 293-313.	2.7	11
71	Waveâ€cloud lines over northwest Australia. Quarterly Journal of the Royal Meteorological Society, 2013, 139, 1311-1326.	2.7	11
72	Gravity waves generated by convection during TWPâ€ICE: I. Inertiaâ€gravity waves. Journal of Geophysical Research D: Atmospheres, 2014, 119, 5269-5282.	3.3	11

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73	Trends in CMIP5 Rainfall Patterns over Southwestern Australia. Journal of Climate, 2017, 30, 1779-1788.	3.2	11
74	Two Synoptic Routes to Subtropical Heat Waves as Illustrated in the Brisbane Region of Australia. Geophysical Research Letters, 2018, 45, 10,700.	4.0	11
75	On Air Motion Trajectories in Cold Fronts. Journals of the Atmospheric Sciences, 1988, 45, 4005-4007.	1.7	10
76	Three-dimensional baroclinic instability and summertime frontogenesis in the Australian region. Quarterly Journal of the Royal Meteorological Society, 1991, 117, 1-28.	2.7	10
77	On the Relationship Between the Maddenâ€Julian Oscillation and the Hadley and Walker Circulations. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2019JD032117.	3.3	10
78	Understanding the Dynamic Contribution to Future Changes in Tropical Precipitation From Lowâ€Level Convergence Lines. Geophysical Research Letters, 2019, 46, 2196-2203.	4.0	9
79	Gravity waves generated by convection during TWPâ€ICE: 2. Highâ€frequency gravity waves. Journal of Geophysical Research D: Atmospheres, 2014, 119, 5257-5268.	3.3	9
80	The structure and evolution of the northern Australian dryline. Australian Meteorological Magazine, 2009, 58, 215-231.	0.4	9
81	The Effect of Sea Surface Temperature Fronts on Atmospheric Frontogenesis. Journals of the Atmospheric Sciences, 2021, , .	1.7	8
82	A comparison between frontogenesis in the two-dimensional Eady model of baroclinic instability and summertime cold fronts in the Australi-an region. Quarterly Journal of the Royal Meteorological Society, 1986, 112, 293-313.	2.7	8
83	MesoLAPS Predictions of Low-Level Convergence Lines over Northeastern Australia. Weather and Forecasting, 2007, 22, 910-927.	1.4	7
84	The intensity and motion of hybrid cyclones in the Australian region in a composite potential vorticity framework. Quarterly Journal of the Royal Meteorological Society, 2019, 145, 273-287.	2.7	7
85	Extreme heat events from an object viewpoint with application to southâ€east Australia. International Journal of Climatology, 2021, 41, 2693-2709.	3.5	7
86	Infrared observations and numerical modelling of grassland fires in the Northern Territory, Australia. Meteorology and Atmospheric Physics, 2005, 88, 193-201.	2.0	6
87	Diurnally forced convergence lines in the Australian Tropics. Quarterly Journal of the Royal Meteorological Society, 2013, 139, 1283-1297.	2.7	6
88	Waveâ€cloud lines over the Arabian Sea. Journal of Geophysical Research D: Atmospheres, 2014, 119, 4447-4457.	3.3	6
89	An Evaluation of Northern Australian Wet Season Rainfall Bursts in CMIP5 Models. Journal of Climate, 2018, 31, 7789-7802.	3.2	6
90	Rapidly Evolving Cirrus Clouds Modulated by Convectively Generated Gravity Waves. Journal of Geophysical Research D: Atmospheres, 2019, 124, 7327.	3.3	6

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91	The synoptic-dynamics of summertime heatwaves in the Sydney area (Australia). Journal of Southern Hemisphere Earth Systems Science, 2019, 69, 116.	1.8	6
92	A climatology of atmospheric pressure jumps over southeastern Australia. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 439-449.	2.7	4
93	Coherent Potential Vorticity Maxima and Their Relationship to Extreme Summer Rainfall in the Australian and North African Tropics. Journal of Southern Hemisphere Earth Systems Science, 2017, 66, 424-456.	1.8	4
94	Vacillation cycles in simulations of hurricaneKatrina. Quarterly Journal of the Royal Meteorological Society, 2014, 140, 1878-1888.	2.7	3
95	Projected Response of Lowâ€Level Convergence and Associated Precipitation to Greenhouse Warming. Geophysical Research Letters, 2017, 44, 10,682.	4.0	3
96	Stochastic Spaceâ€Time Downscaling of Rainfall Using Eventâ€Based Multiplicative Cascade Simulations. Journal of Geophysical Research D: Atmospheres, 2019, 124, 3889-3902.	3.3	3
97	Fluctuations in Inner-Core Structure during the Rapid Intensification of Super Typhoon Nepartak (2016). Monthly Weather Review, 2021, 149, 221-243.	1.4	3
98	Four largeâ€amplitude wave families observed simultaneously over northern Queensland, Australia. Weather, 1998, 53, 134-140.	0.7	2
99	Coherent Potential Vorticity Maxima and Their Relationship to Extreme Summer Rainfall in the Australian and North African Tropics. Journal of Southern Hemisphere Earth Systems Science, 2016, 66, 424.	1.8	2
100	Numerical Modelling of Inertia-Gravity Wave Emission by Fronts and Jets. , 1997, , 137-152.		1
101	The effects of convection and baroclinicity on the motion of tropical-cyclone-like vortices. Quarterly Journal of the Royal Meteorological Society, 1997, 123, 699-725.	2.7	1
102	Models of frontogenesis. Bulletin of the Australian Mathematical Society, 1986, 34, 319-320.	0.5	0
103	Waves generated by a cold front over north-eastern Queensland, Australia. Weather, 2001, 56, 184-184.	0.7	0
104	Time-dependent response of the tropical atmosphere to a fixed sea surface temperature anomaly. Journal of Geophysical Research, 2003, 108, .	3.3	0
105	The â€œstriated deltaâ€•signature of gravity waves generated near the jet stream during rapid extratropical cyclogenesis. Quarterly Journal of the Royal Meteorological Society, 2021, 147, 3628-3646.	2.7	0
106	Three-dimensional baroclinic instability and summertime frontogenesis in the Australian region. Quarterly Journal of the Royal Meteorological Society, 1991, 117, 1-28.	2.7	0
107	Observations and numerical modelling of mountain waves over the Southern Alps of New Zealand. Quarterly Journal of the Royal Meteorological Society, 2000, 126, 2765-2788.	2.7	0
108	Modelling the generation of gravity waves by a maritime continent thunderstorm. Quarterly Journal of the Royal Meteorological Society, 2001, 127, 2705-2724.	2.7	0