Daniel M Mitchell

List of Publications by Year
in descending order

97 papers	4,252 citations	136950 32 h-index	123424 61 g-index
130 all docs	130 docs citations	130 times ranked	5058 citing authors

#	Article	IF	Citations
1	Stratospheric influence on tropospheric jet streams, storm tracks and surface weather. Nature Geoscience, 2015, 8, 433-440.	12.9	515
2	Attributing human mortality during extreme heat waves to anthropogenic climate change. Environmental Research Letters, 2016, 11, 074006.	5.2	264
3	The Influence of Stratospheric Vortex Displacements and Splits on Surface Climate. Journal of Climate, 2013, 26, 2668-2682.	3.2	213
4	Half a degree additional warming, prognosis and projected impacts (HAPPI): background and experimental design. Geoscientific Model Development, 2017, 10, 571-583.	3.6	203
5	A lagged response to the 11 year solar cycle in observed winter Atlantic/European weather patterns. Journal of Geophysical Research D: Atmospheres, 2013, 118, 13,405.	3.3	154
6	Realizing the impacts of a 1.5 Â°C warmer world. Nature Climate Change, 2016, 6, 735-737.	18.8	154
7	Characterizing loss and damage from climate change. Nature Climate Change, 2014, 4, 938-939.	18.8	113
8	A practical method to identify displaced and split stratospheric polar vortex events. Geophysical Research Letters, 2013, 40, 5268-5273.	4.0	111
9	Temperature-related mortality impacts under and beyond Paris Agreement climate change scenarios. Climatic Change, 2018, 150, 391-402.	3.6	107
10	Higher CO2 concentrations increase extreme event risk in a 1.5 Â°C world. Nature Climate Change, 2018, 8, 604-608.	18.8	104
11	Characterizing the Variability and Extremes of the Stratospheric Polar Vortices Using 2D Moment Analysis. Journals of the Atmospheric Sciences, 2011, 68, 1194-1213.	1.7	88
12	The 2021 western North America heat wave among the most extreme events ever recorded globally. Science Advances, 2022, 8, eabm6860.	10.3	83
13	Climatology and interannual variability of dynamic variables in multiple reanalyses evaluated by the SPARC Reanalysis Intercomparison ProjectÂ (S-RIP). Atmospheric Chemistry and Physics, 2017, 17, 14593-14629.	4.9	81
14	weather@home 2: validation of an improved globalâ€"regional climate modelling system. Geoscientific Model Development, 2017, 10, 1849-1872.	3.6	70
15	Event-to-event intensification of the hydrologic cycle from 1.5â€‰Â°C to a 2â€‰Â°C warmer world. Scientific Reports, 2019, 9, 3483.	3.3	67
16	Solar signals in CMIPâ€5 simulations: the stratospheric pathway. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 2390-2403.	2.7	66
17	Increasing risks of multiple breadbasket failure under 1.5 and 2â€¯Â°C global warming. Agricultural Systems, 2019, 175, 34-45.	6.1	64
18	Signatures of naturally induced variability in the atmosphere using multiple reanalysis datasets. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 2011-2031.	2.7	63

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19	Emergence of heat extremes attributable to anthropogenic influences. Geophysical Research Letters, 2016, 43, 3438-3443.	4.0	61
20	Stratospheric polar vortex splits and displacements in the highâ€top CMIP5 climate models. Journal of Geophysical Research D: Atmospheres, 2016, 121, 1400-1413.	3.3	60
21	Solar signals in CMIPâ€5 simulations: effects of atmosphereâ€"ocean coupling. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 928-941.	2.7	52
22	Revisiting the controversial issue of tropical tropospheric temperature trends. Geophysical Research Letters, 2013, 40, 2801-2806.	4.0	46
23	Climate extremes, landâ€"climate feedbacks and land-use forcing at 1.5Â°C. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20160450.	3.4	46
24	Polar vortices on Earth and Mars: A comparative study of the climatology and variability from reanalyses. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 550-562.	2.7	45
25	The Effect of Climate Change on the Variability of the Northern Hemisphere Stratospheric Polar Vortex. Journals of the Atmospheric Sciences, 2012, 69, 2608-2618.	1.7	43
26	Solar signals in CMIPâ€5 simulations: the ozone response. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 2670-2689.	2.7	43
27	Australia's Unprecedented Future Temperature Extremes Under Paris Limits to Warming. Geophysical Research Letters, 2017, 44, 9947-9956.	4.0	42
28	Possible impacts of a future grand solar minimum on climate: Stratospheric and global circulation changes. Journal of Geophysical Research D: Atmospheres, 2015, 120, 9043-9058.	3.3	41
29	The structure and evolution of the stratospheric vortex in response to natural forcings. Journal of Geophysical Research, 2011, 116, .	3.3	39
30	Increasing mitigation ambition to meet the Paris Agreementâ€™s temperature goal avoids substantial heat-related mortality in U.S. cities. Science Advances, 2019, 5, eaau4373.	10.3	37
31	The day the 2003 European heatwave record was broken. Lancet Planetary Health, The, 2019, 3, e290-e292.	11.4	36
32	Combining large model ensembles with extreme value statistics to improve attribution statements of rare events. Weather and Climate Extremes, 2015, 9, 25-35.	4.1	35
33	The effects of different sudden stratospheric warming types on the ocean. Geophysical Research Letters, 2014, 41, 7739-7745.	4.0	34
34	Extreme heat-related mortality avoided under Paris Agreement goals. Nature Climate Change, 2018, 8, 551-553.	18.8	33
35	Enhanced flood risk with 1.5 Â°C global warming in the Gangesâ€"Brahmaputraâ€"Meghna basin. Environmental Research Letters, 2019, 14, 074031.	5.2	33
36	Global temperature response to the major volcanic eruptions in multiple reanalysis data sets. Atmospheric Chemistry and Physics, 2015, 15, 13507-13518.	4.9	32

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37	Future changes in the frequency of temperature extremes may be underestimated in tropical and subtropical regions. Communications Earth & Environment, 2021, 2, .	6.8	32
38	On the Use of Geometric Moments to Examine the Continuum of Sudden Stratospheric Warmings. Journals of the Atmospheric Sciences, 2011, 68, 657-674.	1.7	31
39	Biogeophysical Impacts of Landâ€Use Change on Climate Extremes in Lowâ€Emission Scenarios: Results From HAPPIâ€Land. Earth's Future, 2018, 6, 396-409.	6.3	31
40	Coupling of Stratospheric Warmings with Mesospheric Coolings in Observations and Simulations. Journal of Climate, 2018, 31, 1107-1133.	3.2	31
41	Changes in European wind energy generation potential within a 1.5â€‰Â°C warmer world. Environmental Research Letters, 2018, 13, 054032.	5.2	31
42	On the Linearity of Local and Regional Temperature Changes from 1.5Â°C to 2Â°C of Global Warming. Journal of Climate, 2018, 31, 7495-7514.	3.2	30
43	Assessing mid-latitude dynamics in extreme event attribution systems. Climate Dynamics, 2017, 48, 3889-3901.	3.8	29
44	Changes in extremely hot days under stabilized 1.5 and 2.0â€‰Â°C global warming scenarios as simulated by the HAPPI multi-model ensemble. Earth System Dynamics, 2018, 9, 299-311.	7.1	29
45	Reduced heat exposure by limiting global warming to 1.5 Â°C. Nature Climate Change, 2018, 8, 549-551.	18.8	29
46	Global Freshwater Availability Below Normal Conditions and Population Impact Under 1.5 and 2ÂÂ°C Stabilization Scenarios. Geophysical Research Letters, 2018, 45, 9803-9813.	4.0	29
47	Models versus radiosondes in the free atmosphere: A new detection and attribution analysis of temperature. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2609-2619.	3.3	27
48	Revisiting the observed surface climate response to large volcanic eruptions. Atmospheric Chemistry and Physics, 2017, 17, 485-499.	4.9	27
49	Midlatitude atmospheric circulation responses under 1.5 and 2.0â€¯Â°C warming and implications for regional impacts. Earth System Dynamics, 2018, 9, 359-382.	7.1	27
50	Regional hotspots of temperature extremes under 1.5â€¯Â°C and 2â€¯Â°C of global mean warming. Weather and Climate Extremes, 2019, 26, 100233.	4.1	27
51	Hurricanes Harvey, Irma and Maria: how natural were these â€˜natural disastersâ€™?. Weather, 2017, 72, 353-354.	0.7	26
52	The vertical profile of recent tropical temperature trends: Persistent model biases in the context of internal variability. Environmental Research Letters, 2020, 15, 1040b4.	5.2	25
53	The Impact of Humanâ€Induced Climate Change on Regional Drought in the Horn of Africa. Journal of Geophysical Research D: Atmospheres, 2019, 124, 4549-4566.	3.3	23
54	Tracking the Stratosphereâ€toâ€Surface Impact of Sudden Stratospheric Warmings. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033881.	3.3	22

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55	U.K. Climate Projections: Summer Daytime and Nighttime Urban Heat Island Changes in Englandâ€™s Major Cities. Journal of Climate, 2020, 33, 9015-9030.	3.2	22
56	The 2014 Drought in the Horn of Africa: Attribution of Meteorological Drivers. Bulletin of the American Meteorological Society, 2015, 96, S83-S88.	3.3	21
57	Larger Spatial Footprint of Wintertime Total Precipitation Extremes in a Warmer Climate. Geophysical Research Letters, 2021, 48, e2020GL091990.	4.0	19
58	The myriad challenges of the Paris Agreement. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20180066.	3.4	18
59	Evaluating heat extremes in the UK Climate Projections (UKCP18). Environmental Research Letters, 2021, 16, 014039.	5.2	18
60	Climate attribution of heat mortality. Nature Climate Change, 2021, 11, 467-468.	18.8	18
61	Investigating eventâ€specific drought attribution using selfâ€organizing maps. Journal of Geophysical Research D: Atmospheres, 2016, 121, 12,766.	3.3	17
62	Anthropogenic climate change and heat effects on health. International Journal of Climatology, 2019, 39, 4751-4768.	3.5	17
63	Potential vorticity structure of Titanâ€™s polar vortices from Cassini CIRS observations. Icarus, 2021, 354, 114030.	2.5	17
64	Estimating heat-related mortality in near real time for national heatwave plans. Environmental Research Letters, 2022, 17, 024017.	5.2	16
65	The Contribution of Human-Induced Climate Change to the Drought of 2014 in the Southern Levant Region. Bulletin of the American Meteorological Society, 2015, 96, S66-S70.	3.3	15
66	Human Influences on Heat-Related Health Indicators During the 2015 Egyptian Heat Wave. Bulletin of the American Meteorological Society, 2016, 97, S70-S74.	3.3	15
67	The nature of Arctic polar vortices in chemistryâ€“climate models. Quarterly Journal of the Royal Meteorological Society, 2012, 138, 1681-1691.	2.7	14
68	Vortex splitting on a planetary scale in the stratosphere by cyclogenesis on a subplanetary scale in the troposphere. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 691-705.	2.7	14
69	Historical and future anthropogenic warming effects on droughts, fires and fire emissions of CO₂ and PM_{2.5} in equatorial Asia when 2015-like El NiÃ±o events occur. Earth System Dynamics, 2020, 11, 435-445.	7.1	14
70	Attributing the forced components of observed stratospheric temperature variability to external drivers. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 1041-1047.	2.7	13
71	Persistent Model Biases in the CMIP6 Representation of Stratospheric Polar Vortex Variability. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034759.	3.3	13
72	Global aridity changes due to differences in surface energy and water balance between 1.5 Â°C and 2 Â°C warming. Environmental Research Letters, 2020, 15, 0940a7.	5.2	13

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73	Dynamical and surface impacts of the JanuaryÂ2021 sudden stratospheric warming in novel Aeolus wind observations, MLS and ERA5. Weather and Climate Dynamics, 2021, 2, 1283-1301.	3.5	13
74	Limiting global warming to 1.5 Â°C will lower increases in inequalities of four hazard indicators of climate change. Environmental Research Letters, 2019, 14, 124022.	5.2	12
75	Mapping the zonal structure of Titan's northern polar vortex. Icarus, 2020, 337, 113441.	2.5	12
76	Severe Frosts in Western Australia in September 2016. Bulletin of the American Meteorological Society, 2018, 99, S150-S154.	3.3	11
77	The Roles of Latent Heating and Dust in the Structure and Variability of the Northern Martian Polar Vortex. Planetary Science Journal, 2021, 2, 203.	3.6	11
78	The stratopause evolution during different types of sudden stratospheric warming event. Climate Dynamics, 2015, 44, 3323-3337.	3.8	9
79	Method Uncertainty Is Essential for Reliable Confidence Statements of Precipitation Projections. Journal of Climate, 2021, 34, 1227-1240.	3.2	9
80	Effects of 1.5Â°C and 2Â°C of warming on regional reference evapotranspiration and drying: A case study of the Yellow River Basin, China. International Journal of Climatology, 2021, 41, 791-810.	3.5	7
81	Polar Vortices in Planetary Atmospheres. Reviews of Geophysics, 2021, 59, e2020RG000723.	23.0	7
82	The numerous approaches to tracking extratropical cyclones and the challenges they present. Weather, 2020, 75, 336-341.	0.7	6
83	Stratospheric Nudging And Predictable Surface Impacts (SNAPSI): a protocol for investigating the role of stratospheric polar vortex disturbances in subseasonal to seasonal forecasts. Geoscientific Model Development, 2022, 15, 5073-5092.	3.6	6
84	A comparison of model ensembles for attributing 2012 West African rainfall. Environmental Research Letters, 2017, 12, 014019.	5.2	5
85	Assessing changes in risk of amplified planetary waves in a warming world. Atmospheric Science Letters, 2019, 20, e929.	1.9	5
86	Projected risks associated with heat stress in the UK Climate Projections (UKCP18). Environmental Research Letters, 2022, 17, 034024.	5.2	5
87	Model cascade from meteorological drivers to river flood hazard: flood-cascade v1.0. Geoscientific Model Development, 2021, 14, 4865-4890.	3.6	4
88	Regional disparities and seasonal differences in climate risk to rice labour. Environmental Research Letters, 2021, 16, 124004.	5.2	4
89	The Bristol <scp>CMIP6</scp> Data Hackathon. Weather, 2022, 77, 218-221.	0.7	4
90	How Well Are Sudden Stratospheric Warming Surface Impacts Captured in CMIP6 Climate Models?. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	4

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91	What do changing weather and climate shocks and stresses mean for the UK food system?. Environmental Research Letters, 2022, 17, 051001.	5.2	4
92	The impact of stratospheric resolution on the detectability of climate change signals in the free atmosphere. Geophysical Research Letters, 2013, 40, 937-942.	4.0	3
93	Organising a collaborative online hackathon for cuttingâ€edge climate research. Weather, 2022, 77, 221-226.	0.7	3
94	Increased population exposure to Amphanâ€scale cyclones under future climates. Climate Resilience and Sustainability, 2022, 1, .	2.3	3
95	Concerns over calculating injury-related deaths associated with temperature. Nature Medicine, 2020, 26, 1825-1826.	30.7	2
96	Editorial: Climate Science Advances to Address 21st Century Weather and Climate Extremes. Frontiers in Climate, 2021, 3, .	2.8	1
97	How will climate change affect <scp>UK</scp> heatwaves?. Weather, 2021, 76, 326-327.	0.7	1