Simon F B Tett

List of Publications by Year
in descending order

130 papers	13,586 citations	38742 50 h-index	22166 113 g-index
149 all docs	149 docs citations	149 times ranked	10188 citing authors

#	Article	IF	Citations
1	Uncertainty estimates in regional and global observed temperature changes: A new data set from 1850. Journal of Geophysical Research, 2006, 111, .	3.3	1,623
2	High-resolution palaeoclimatic records for the last millennium: interpretation, integration and comparison with General Circulation Model control-run temperatures. Holocene, 1998, 8, 455-471.	1.7	728
3	Improved Analyses of Changes and Uncertainties in Sea Surface Temperature Measured In Situ since the Mid-Nineteenth Century: The HadSST2 Dataset. Journal of Climate, 2006, 19, 446-469.	3.2	721
4	Climate response to increasing levels of greenhouse gases and sulphate aerosols. Nature, 1995, 376, 501-504.	27.8	688
5	The second Hadley Centre coupled ocean-atmosphere GCM: model description, spinup and validation. Climate Dynamics, 1997, 13, 103-134.	3.8	668
6	External Control of 20th Century Temperature by Natural and Anthropogenic Forcings. Science, 2000, 290, 2133-2137.	12.6	568
7	Anthropogenic climate change for 1860 to 2100 simulated with the HadCM3 model under updated emissions scenarios. Climate Dynamics, 2003, 20, 583-612.	3.8	486
8	Causes of twentieth-century temperature change near the Earth's surface. Nature, 1999, 399, 569-572.	27.8	477
9	A search for human influences on the thermal structure of the atmosphere. Nature, 1996, 382, 39-46.	27.8	397
10	Reconstructing Past Climate from Noisy Data. Science, 2004, 306, 679-682.	12.6	385
11	Checking for model consistency in optimal fingerprinting. Climate Dynamics, 1999, 15, 419-434.	3.8	348
12	The internal climate variability of HadCM3, a version of the Hadley Centre coupled model without flux adjustments. Climate Dynamics, 2001, 17, 61-81.	3.8	348
13	Storylines: an alternative approach to representing uncertainty in physical aspects of climate change. Climatic Change, 2018, 151, 555-571.	3.6	317
14	European climate response to tropical volcanic eruptions over the last half millennium. Geophysical Research Letters, 2007, 34, .	4.0	296
15	Evaluation of the North Atlantic Oscillation as simulated by a coupled climate model. Climate Dynamics, 1999, 15, 685-702.	3.8	286
16	Human Influence on the Atmospheric Vertical Temperature Structure: Detection and Observations. Science, 1996, 274, 1170-1173.	12.6	245
17	Estimation of natural and anthropogenic contributions to twentieth century temperature change. Journal of Geophysical Research, 2002, 107, ACL 10-1.	3.3	216
18	Detecting and Attributing External Influences on the Climate System: A Review of Recent Advances. Journal of Climate, 2005, 18, 1291-1314.	3.2	198

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19	Attribution of twentieth century temperature change to natural and anthropogenic causes. Climate Dynamics, 2001, 17, 1-21.	3.8	186
20	Revisiting radiosonde upper air temperatures from 1958 to 2002. Journal of Geophysical Research, 2005, 110, .	3.3	175
21	Small influence of solar variability on climate over the past millennium. Nature Geoscience, 2014, 7, 104-108.	12.9	162
22	Anthropogenically-driven increases in the risks of summertime compound hot extremes. Nature Communications, 2020, 11, 528.	12.8	146
23	Detection and Attribution of Recent Climate Change: A Status Report. Bulletin of the American Meteorological Society, 1999, 80, 2631-2659.	3.3	145
24	Separating Forced from Chaotic Climate Variability over the Past Millennium. Journal of Climate, 2013, 26, 6954-6973.	3.2	139
25	Large-scale temperature response to external forcing in simulations and reconstructions of the last millennium. Climate of the Past, 2013, 9, 393-421.	3.4	131
26	Influence of human and natural forcing on European seasonal temperatures. Nature Geoscience, 2011, 4, 99-103.	12.9	118
27	Anthropogenic emissions and urbanization increase risk of compound hot extremes in cities. Nature Climate Change, 2021, 11, 1084-1089.	18.8	117
28	Scale-Dependent Detection of Climate Change. Journal of Climate, 1998, 11, 3282-3294.	3.2	108
29	The impact of natural and anthropogenic forcings on climate and hydrology since 1550. Climate Dynamics, 2006, 28, 3-34.	3.8	106
30	Chapter 1 Mediterranean climate variability over the last centuries: A review. Developments in Earth and Environmental Sciences, 2006, 4, 27-148.	0.1	105
31	An AOGCM simulation of the climate response to a volcanic super-eruption. Climate Dynamics, 2005, 25, 725-738.	3.8	97
32	Importance of the pre-industrial baseline for likelihood of exceeding Paris goals. Nature Climate Change, 2017, 7, 563-567.	18.8	93
33	Recent observed changes in severe storms over the United Kingdom and Iceland. Geophysical Research Letters, 2005, 32, .	4.0	90
34	Fossil fuels in a trillion tonne world. Nature Climate Change, 2015, 5, 419-423.	18.8	89
35	Simulation of El NiÃ±o-Southern Oscillation-like Variability in a Global AOGCM and its Response to CO2Increase. Journal of Climate, 1995, 8, 1473-1502.	3.2	85
36	Global and regional variability in a coupled AOGCM. Climate Dynamics, 1997, 13, 303-323.	3.8	81

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37	Testing the linearity of the response to combined greenhouse gas and sulfate aerosol forcing. Geophysical Research Letters, 2004, 31, .	4.0	76
38	Two-hundred-fifty years of reconstructed and modeled tropical temperatures. Journal of Geophysical Research, 2006, 111, .	3.3	74
39	Isolating the signal of ocean global warming. Geophysical Research Letters, 2007, 34, .	4.0	74
40	Summer heat waves over Eastern China: dynamical processes and trend attribution. Environmental Research Letters, 2017, 12, 024015.	5.2	71
41	A global climatology of the diurnal variations in sea-surface temperature and implications for MSU temperature trends. Geophysical Research Letters, 2007, 34, .	4.0	70
42	Simulated Global-Mean Sea Level Changes over the Last Half-Millennium. Journal of Climate, 2006, 19, 4576-4591.	3.2	67
43	Simple indices of global climate variability and change: Part I â€“ variability and correlation structure. Climate Dynamics, 2003, 20, 491-502.	3.8	66
44	Fluctuations in autumnâ€“winter severe storms over the British Isles: 1920 to present. International Journal of Climatology, 2009, 29, 357-371.	3.5	65
45	Progress in Paleoclimate Modeling*. Journal of Climate, 2006, 19, 5031-5057.	3.2	63
46	A Comparison of Surface Air Temperature Variability in Three 1000-Yr Coupled Oceanâ€“Atmosphere Model Integrations. Journal of Climate, 2000, 13, 513-537.	3.2	62
47	Critically Reassessing Tropospheric Temperature Trends from Radiosondes Using Realistic Validation Experiments. Journal of Climate, 2009, 22, 465-485.	3.2	61
48	Simple indices of global climate variability and change Part II: attribution of climate change during the twentieth century. Climate Dynamics, 2004, 22, 823-838.	3.8	60
49	A Comparison of the Variability of a Climate Model with Paleotemperature Estimates from a Network of Tree-Ring Densities. Journal of Climate, 2002, 15, 1497-1515.	3.2	56
50	Assessing Bias and Uncertainty in the HadAT-Adjusted Radiosonde Climate Record. Journal of Climate, 2008, 21, 817-832.	3.2	54
51	Optimal detection and attribution of climate change: sensitivity of results to climate model differences. Climate Dynamics, 2000, 16, 737-754.	3.8	52
52	Fourâ€decade record of pervasive grounding line retreat along the Bellingshausen margin of West Antarctica. Geophysical Research Letters, 2016, 43, 5741-5749.	4.0	49
53	A quantification of uncertainties in historical tropical tropospheric temperature trends from radiosondes. Journal of Geophysical Research, 2011, 116, .	3.3	48
54	Deriving a sea surface temperature record suitable for climate change research from the along-track scanning radiometers. Advances in Space Research, 2008, 41, 1-11.	2.6	47

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55	Probable causes of late twentieth century tropospheric temperature trends. Climate Dynamics, 2003, 21, 573-591.	3.8	43
56	Global evaluation of gross primary productivity in the JULES land surface model v3.4.1. Geoscientific Model Development, 2017, 10, 2651-2670.	3.6	42
57	Human Influence on the Record-breaking Cold Event in January of 2016 in Eastern China. Bulletin of the American Meteorological Society, 2018, 99, S118-S122.	3.3	42
58	Homogenized Daily Relative Humidity Series in China during 1960â€“2017. Advances in Atmospheric Sciences, 2020, 37, 318-327.	4.3	42
59	Estimating the Transient Climate Response from Observed Warming. Journal of Climate, 2018, 31, 8645-8663.	3.2	37
60	Underestimated Change of Wetâ€Bulb Temperatures Over East and South China. Geophysical Research Letters, 2020, 47, e2019GL086140.	4.0	37
61	Causes of atmospheric temperature change 1960-2000: A combined attribution analysis. Geophysical Research Letters, 2003, 30, n/a-n/a.	4.0	36
62	Modelled and observed variability in atmospheric vertical temperature structure. Climate Dynamics, 2000, 16, 49-61.	3.8	35
63	Attribution of extreme precipitation in the lower reaches of the Yangtze River during May 2016. Environmental Research Letters, 2018, 13, 014015.	5.2	34
64	Evaluation of the HadGEM3-A simulations in view of detection and attribution of human influence on extreme events in Europe. Climate Dynamics, 2019, 52, 1187-1210.	3.8	34
65	Interpretations of the Paris climate target. Nature Geoscience, 2018, 11, 220-221.	12.9	33
66	Carbon accounting for negative emissions technologies. Climate Policy, 2021, 21, 699-717.	5.1	33
67	Correcting urban bias in largeâ€scale temperature records in China, 1980â€“2009. Geophysical Research Letters, 2017, 44, 401-408.	4.0	31
68	Constraints on the temperature sensitivity of global soil respiration from the observed interannual variability in atmospheric CO2. Atmospheric Science Letters, 2001, 2, 166-172.	1.9	29
69	Can a Decadal Forecasting System Predict Temperature Extreme Indices?*. Journal of Climate, 2013, 26, 3728-3744.	3.2	28
70	Can Top-of-Atmosphere Radiation Measurements Constrain Climate Predictions? Part II: Climate Sensitivity. Journal of Climate, 2013, 26, 9367-9383.	3.2	23
71	Discrepancies between the modeled and proxyâ€reconstructed response to volcanic forcing over the past millennium: Implications and possible mechanisms. Journal of Geophysical Research D: Atmospheres, 2013, 118, 7617-7627.	3.3	23
72	Attributing human influence on the July 2017 Chinese heatwave: the influence of sea-surface temperatures. Environmental Research Letters, 2018, 13, 114004.	5.2	23

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73	â€œAgro-meteorological indices and climate model uncertainty over the UKâ€. Climatic Change, 2015, 128, 113-126.	3.6	22
74	Evaluation of mechanisms of hot and cold days in climate models over Central Europe. Environmental Research Letters, 2015, 10, 014002.	5.2	21
75	Anthropogenic Warming has Substantially Increased the Likelihood of July 2017â€"Like Heat Waves over Central Eastern China. Bulletin of the American Meteorological Society, 2019, 100, S91-S95.	3.3	21
76	Anthropogenic Influences on the Persistent Night-Time Heat Wave in Summer 2018 over Northeast China. Bulletin of the American Meteorological Society, 2020, 101, S83-S88.	3.3	21
77	Uncertainty levels in predicted patterns of anthropogenic climate change. Journal of Geophysical Research, 2000, 105, 15525-15542.	3.3	20
78	Obtaining diverse behaviors in a climate model without the use of flux adjustments. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2781-2793.	3.3	20
79	Climatological Diurnal Cycles in Clear-Sky Brightness Temperatures from the High-Resolution Infrared Radiation Sounder (HIRS). Journal of Atmospheric and Oceanic Technology, 2011, 28, 1199-1205.	1.3	19
80	Can Top-of-Atmosphere Radiation Measurements Constrain Climate Predictions? Part I: Tuning. Journal of Climate, 2013, 26, 9348-9366.	3.2	19
81	Anthropogenic Influence on 2018 Summer Persistent Heavy Rainfall in Central Western China. Bulletin of the American Meteorological Society, 2020, 101, S65-S70.	3.3	19
82	How Much Has the North Atlantic Ocean Overturning Circulation Changed in the Last 50 Years?. Journal of Climate, 2014, 27, 6325-6342.	3.2	18
83	Impacts of Anthropogenic Forcings and El NiÃ±o on Chinese Extreme Temperatures. Advances in Atmospheric Sciences, 2018, 35, 994-1002.	4.3	18
84	Anthropogenic Influence on 2019 Mayâ€"June Extremely Low Precipitation in Southwestern China. Bulletin of the American Meteorological Society, 2021, 102, S97-S102.	3.3	18
85	Changes in regional wet heatwave in Eurasia during summer (1979â€"2017). Environmental Research Letters, 2021, 16, 064094.	5.2	18
86	Variability of Deep-Ocean Mass Transport: Spectral Shapes and Spatial Scales. Journal of Climate, 2000, 13, 1916-1935.	3.2	17
87	Assessing the robustness of zonal mean climate change detection. Geophysical Research Letters, 2002, 29, 26-1-26-4.	4.0	16
88	Multi-site evaluation of the JULES land surface model using global and local data. Geoscientific Model Development, 2015, 8, 295-316.	3.6	16
89	Was the Cold European Winter of 2009/10 Modified by Anthropogenic Climate Change? An Attribution Study. Journal of Climate, 2018, 31, 3387-3410.	3.2	16
90	Attribution of Detected Temperature Trends in Southeast Brazil. Geophysical Research Letters, 2019, 46, 8407-8414.	4.0	15

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91	The Local Aerosol Emission Effect on Surface Shortwave Radiation and Temperatures. Journal of Advances in Modeling Earth Systems, 2019, 11, 806-817.	3.8	15
92	Calibrating climate models using inverse methods: case studies with HadAM3, HadAM3P and HadCM3. Geoscientific Model Development, 2017, 10, 3567-3589.	3.6	14
93	Glacier change along West Antarctica's Marie Byrd Land Sector and links to inter-decadal atmosphereâ€“ocean variability. Cryosphere, 2018, 12, 2461-2479.	3.9	14
94	Contribution of Anthropogenic Climate Change to Aprilâ€“May 2017 Heavy Precipitation over the Uruguay River Basin. Bulletin of the American Meteorological Society, 2019, 100, S37-S41.	3.3	14
95	Disentangling the causes of the 1816 European year without a summer. Environmental Research Letters, 2019, 14, 094019.	5.2	13
96	Ocean and land forcing of the record-breaking Dust Bowl heatwaves across central United States. Nature Communications, 2020, 11, 2870.	12.8	13
97	How much has urbanisation affected United Kingdom temperatures?. Atmospheric Science Letters, 2019, 20, e896.	1.9	12
98	Widespread Persistent Extreme Cold Events Over Southâ€East China: Mechanisms, Trends, and Attribution. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033447.	3.3	12
99	Anthropogenic Influences on Heavy Precipitation during the 2019 Extremely Wet Rainy Season in Southern China. Bulletin of the American Meteorological Society, 2021, 102, S103-S109.	3.3	12
100	Tropospheric temperature series from satellites. Nature, 2004, 432, 1-1.	27.8	11
101	Using IASI to simulate the total spectrum of outgoing long-wave radiances. Atmospheric Chemistry and Physics, 2015, 15, 6561-6575.	4.9	11
102	Using longwave HIRS radiances to test climate models. Climate Dynamics, 2014, 43, 1103-1127.	3.8	10
103	Central-Eastern China Persistent Heat Waves: Evaluation of the AMIP Models. Journal of Climate, 2018, 31, 3609-3624.	3.2	10
104	Have human activities changed the frequencies of absolute extreme temperatures in eastern China?. Environmental Research Letters, 2018, 13, 014012.	5.2	10
105	Anthropogenic Influences on 2019 July Precipitation Extremes Over the Midâ€“Lower Reaches of the Yangtze River. Frontiers in Environmental Science, 0, 8, .	3.3	10
106	Learning from the 2018 heatwave in the context of climate change: are high-temperature extremes important for adaptation in Scotland?. Environmental Research Letters, 2020, 15, 034051.	5.2	10
107	Reduced Probability of 2020 Juneâ€“July Persistent Heavy Mei-yu Rainfall Event in the Middle to Lower Reaches of the Yangtze River Basin under Anthropogenic Forcing. Bulletin of the American Meteorological Society, 2022, 103, S83-S89.	3.3	10
108	What is the Uncertainty in Degree-Day Projections due to Different Calibration Methodologies?. Journal of Climate, 2017, 30, 9059-9075.	3.2	9

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109	Projected near term changes in the East Asian summer monsoon and its uncertainty. Environmental Research Letters, 2019, 14, 084038.	5.2	9
110	Climate Modelâ€"Simulated Diurnal Cycles in HIRS Clear-Sky Brightness Temperatures. Journal of Climate, 2012, 25, 5845-5863.	3.2	8
111	Automated parameter tuning applied to sea ice in a global climate model. Climate Dynamics, 2018, 50, 51-65.	3.8	8
112	Anthropogenic and natural causes of twentieth century temperature change. Space Science Reviews, 2000, 94, 337-344.	8.1	7
113	Near-term prediction of impact-relevant extreme temperature indices. Climatic Change, 2015, 132, 61-76.	3.6	7
114	Does Model Calibration Reduce Uncertainty in Climate Projections?. Journal of Climate, 2022, 35, 2585-2602.	3.2	7
115	Anthropogenic Forcings and Associated Changes in Fire Risk in Western North America and Australia During 2015/16. Bulletin of the American Meteorological Society, 2018, 99, S60-S64.	3.3	6
116	Understanding Interdependent Climate Change Risks Using a Serious Game. Bulletin of the American Meteorological Society, 2020, 101, E1279-E1300.	3.3	6
117	Detectable anthropogenic changes in daily-scale circulations driving summer rainfall shifts over eastern China. Environmental Research Letters, 2021, 16, 074044.	5.2	6
118	Quantifying the contribution of an individual to making extreme weather events more likely. Environmental Research Letters, 2021, 16, 104040.	5.2	6
119	Was the Extended Rainy Winter 2018/19 over the Middle and Lower Reaches of the Yangtze River Driven by Anthropogenic Forcing?. Bulletin of the American Meteorological Society, 2021, 102, S67-S73.	3.3	5
120	Attributing the 2015/2016 Amazon basin drought to anthropogenic influence. Climate Resilience and Sustainability, 2022, 1, .	2.3	5
121	A derivative-free optimisation method for global ocean biogeochemical models. Geoscientific Model Development, 2022, 15, 3537-3554.	3.6	5
122	Can downwelling far-infrared radiances over Antarctica be estimated from mid-infrared information?. Atmospheric Chemistry and Physics, 2019, 19, 7927-7937.	4.9	3
123	MEETING SUMMARIES. Bulletin of the American Meteorological Society, 2005, 86, 1471-1480.	3.3	2
124	Physical processes of summer extreme rainfall interannual variability in Eastern Chinaâ€"part II: evaluation of CMIP6 models. Climate Dynamics, 2022, 59, 455-469.	3.8	2
125	Ascribing potential causes of recent trends in free atmosphere temperatures. Atmospheric Science Letters, 2001, 2, 132-142.	1.9	1
126	Natural and Anthropogenic Causes of Recent Climate Change. , 2001, , 275-290.		1

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127	Ocean-Atmosphere interaction and climate modelling. Journal of Experimental Marine Biology and Ecology, 1995, 194, 287-289.	1.5	0
128	Camelot â€" a database for climate model output. Meteorological Applications, 2000, 7, 83-90.	2.1	0
129	The Sun won't save us. New Scientist, 2006, 192, 27.	0.0	0
130	Anthropogenic and Natural Causes of Twentieth Century Temperature Change. Space Sciences Series of ISSI, 2000, , 337-344.	0.0	0