Simon F B Tett

List of Publications by Citations

133 papers	10,994 citations	47 h-index	104 g-index
149 ext. papers	12,083 ext. citations	7.8 avg, IF	6 L-index

#	Paper	IF	Citations
133	Uncertainty estimates in regional and global observed temperature changes: A new data set from 1850. *Journal of Geophysical Research*, **2006**, 111,		1387
132	High-resolution palaeoclimatic records for the last millennium: interpretation, integration and comparison with General Circulation Model control-run temperatures. *Holocene*, **1998**, 8, 455-471	2.6	645
131	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	4.4	627
130	Climate response to increasing levels of greenhouse gases and sulphate aerosols. *Nature*, **1995**, 376, 501-504	50.4	568
129	The second Hadley Centre coupled ocean-atmosphere GCM: model description, spinup and validation. *Climate Dynamics*, **1997**, 13, 103-134	4.2	520
128	External control of 20th century temperature by natural and anthropogenic forcings. *Science*, **2000**, 290, 2133-7	33.3	491
127	Anthropogenic climate change for 1860 to 2100 simulated with the HadCM3 model under updated emissions scenarios. *Climate Dynamics*, **2003**, 20, 583-612	4.2	444
126	Causes of twentieth-century temperature change near the Earth's surface. *Nature*, **1999**, 399, 569-572	50.4	420
125	Reconstructing past climate from noisy data. *Science*, **2004**, 306, 679-82	33.3	326
124	A search for human influences on the thermal structure of the atmosphere. *Nature*, **1996**, 382, 39-46	50.4	320
123	The internal climate variability of HadCM3, a version of the Hadley Centre coupled model without flux adjustments. *Climate Dynamics*, **2001**, 17, 61-81	4.2	318
122	Checking for model consistency in optimal fingerprinting. *Climate Dynamics*, **1999**, 15, 419-434	4.2	296
121	Evaluation of the North Atlantic Oscillation as simulated by a coupled climate model. *Climate Dynamics*, **1999**, 15, 685-702	4.2	259
120	European climate response to tropical volcanic eruptions over the last half millennium. *Geophysical Research Letters*, **2007**, 34,	4.9	258
119	Human Influence on the Atmospheric Vertical Temperature Structure: Detection and Observations. *Science*, **1996**, 274, 1170-3	33.3	211
118	Estimation of natural and anthropogenic contributions to twentieth century temperature change. *Journal of Geophysical Research*, **2002**, 107, ACL 10-1		181
117	Detecting and Attributing External Influences on the Climate System: A Review of Recent Advances. *Journal of Climate*, **2005**, 18, 1291-1314	4.4	173

116	Revisiting radiosonde upper air temperatures from 1958 to 2002. *Journal of Geophysical Research*, **2005**, 110,		159
115	Attribution of twentieth century temperature change to natural and anthropogenic causes. *Climate Dynamics*, **2001**, 17, 1-21	4.2	145
114	Storylines: an alternative approach to representing uncertainty in physical aspects of climate change. *Climatic Change*, **2018**, 151, 555-571	4.5	130
113	Small influence of solar variability on climate over the past millennium. *Nature Geoscience*, **2014**, 7, 104-108	18.3	118
112	Detection and Attribution of Recent Climate Change: A Status Report. *Bulletin of the American Meteorological Society*, **1999**, 80, 2631-2659	6.1	116
111	Large-scale temperature response to external forcing in simulations and reconstructions of the last millennium. *Climate of the Past*, **2013**, 9, 393-421	3.9	113
110	Separating Forced from Chaotic Climate Variability over the Past Millennium. *Journal of Climate*, **2013**, 26, 6954-6973	4.4	111
109	Influence of human and natural forcing on European seasonal temperatures. *Nature Geoscience*, **2011**, 4, 99-103	18.3	100
108	Scale-Dependent Detection of Climate Change. *Journal of Climate*, **1998**, 11, 3282-3294	4.4	99
107	The impact of natural and anthropogenic forcings on climate and hydrology since 1550. *Climate Dynamics*, **2006**, 28, 3-34	4.2	98
106	Chapter 1 Mediterranean climate variability over the last centuries: A review. *Developments in Earth and Environmental Sciences*, **2006**, 4, 27-148		87
105	An AOGCM simulation of the climate response to a volcanic super-eruption. *Climate Dynamics*, **2005**, 25, 725-738	4.2	83
104	Simulation of El Niño-Southern Oscillation-like Variability in a Global AOGCM and its Response to CO2Increase. *Journal of Climate*, **1995**, 8, 1473-1502	4.4	77
103	Recent observed changes in severe storms over the United Kingdom and Iceland. *Geophysical Research Letters*, **2005**, 32,	4.9	76
102	Importance of the Pre-Industrial Baseline in Determining the Likelihood of Exceeding the Paris Limits. *Nature Climate Change*, **2017**, 7, 563-567	21.4	67
101	Testing the linearity of the response to combined greenhouse gas and sulfate aerosol forcing. *Geophysical Research Letters*, **2004**, 31,	4.9	67
100	Isolating the signal of ocean global warming. *Geophysical Research Letters*, **2007**, 34, n/a-n/a	4.9	66
99	Two-hundred-fifty years of reconstructed and modeled tropical temperatures. *Journal of Geophysical Research*, **2006**, 111,		64

98	Fossil fuels in a trillion tonne world. *Nature Climate Change*, **2015**, 5, 419-423	21.4	63
97	Simulated Global-Mean Sea Level Changes over the Last Half-Millennium. *Journal of Climate*, **2006**, 19, 4576-4591	4.4	61
96	Fluctuations in autumn–winter severe storms over the British Isles: 1920 to present. *International Journal of Climatology*, **2009**, 29, 357-371	3.5	58
95	A global climatology of the diurnal variations in sea-surface temperature and implications for MSU temperature trends. *Geophysical Research Letters*, **2007**, 34,	4.9	57
94	Simple indices of global climate variability and change: Part I – variability and correlation structure. *Climate Dynamics*, **2003**, 20, 491-502	4.2	57
93	A Comparison of Surface Air Temperature Variability in Three 1000-Yr Coupled Ocean–Atmosphere Model Integrations. *Journal of Climate*, **2000**, 13, 513-537	4.4	55
92	Critically Reassessing Tropospheric Temperature Trends from Radiosondes Using Realistic Validation Experiments. *Journal of Climate*, **2009**, 22, 465-485	4.4	53
91	Progress in Paleoclimate Modeling*. *Journal of Climate*, **2006**, 19, 5031-5057	4.4	53
90	Assessing Bias and Uncertainty in the HadAT-Adjusted Radiosonde Climate Record. *Journal of Climate*, **2008**, 21, 817-832	4.4	50
89	Simple indices of global climate variability and change Part II: attribution of climate change during the twentieth century. *Climate Dynamics*, **2004**, 22, 823-838	4.2	50
88	Anthropogenically-driven increases in the risks of summertime compound hot extremes. *Nature Communications*, **2020**, 11, 528	17.4	49
87	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	4.4	47
86	Summer heat waves over Eastern China: dynamical processes and trend attribution. *Environmental Research Letters*, **2017**, 12, 024015	6.2	45
85	Optimal detection and attribution of climate change: sensitivity of results to climate model differences. *Climate Dynamics*, **2000**, 16, 737-754	4.2	45
84	Global and regional variability in a coupled AOGCM. *Climate Dynamics*, **1997**, 13, 303-323	4.2	41
83	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	2.4	41
82	A quantification of uncertainties in historical tropical tropospheric temperature trends from radiosondes. *Journal of Geophysical Research*, **2011**, 116,		38
81	Four-decade record of pervasive grounding line retreat along the Bellingshausen margin of West Antarctica. *Geophysical Research Letters*, **2016**, 43, 5741-5749	4.9	36

80	Probable causes of late twentieth century tropospheric temperature trends. *Climate Dynamics*, **2003**, 21, 573-591	4.2	34
79	Global evaluation of gross primary productivity in the JULES land surface model v3.4.1. *Geoscientific Model Development*, **2017**, 10, 2651-2670	6.3	30
78	Causes of atmospheric temperature change 1960–2000: A combined attribution analysis. *Geophysical Research Letters*, **2003**, 30, n/a-n/a	4.9	29
77	Modelled and observed variability in atmospheric vertical temperature structure. *Climate Dynamics*, **2000**, 16, 49-61	4.2	28
76	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	6.1	28
75	Estimating the Transient Climate Response from Observed Warming. *Journal of Climate*, **2018**, 31, 8645-8663	4.4	27
74	Correcting urban bias in large-scale temperature records in China, 1980–2009. *Geophysical Research Letters*, **2017**, 44, 401-408	4.9	24
73	Ascribing potential causes of recent trends in free atmosphere temperatures. *Atmospheric Science Letters*, **2001**, 2, 166-172	2.4	24
72	Interpretations of the Paris climate target. *Nature Geoscience*, **2018**, 11, 220-221	18.3	23
71	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	4.2	22
70	Can a Decadal Forecasting System Predict Temperature Extreme Indices?*. *Journal of Climate*, **2013**, 26, 3728-3744	4.4	21
69	Attribution of extreme precipitation in the lower reaches of the Yangtze River during May 2016. *Environmental Research Letters*, **2018**, 13, 014015	6.2	20
68	Can Top-of-Atmosphere Radiation Measurements Constrain Climate Predictions? Part II: Climate Sensitivity. *Journal of Climate*, **2013**, 26, 9367-9383	4.4	20
67	Evaluation of mechanisms of hot and cold days in climate models over Central Europe. *Environmental Research Letters*, **2015**, 10, 014002	6.2	19
66	Obtaining diverse behaviors in a climate model without the use of flux adjustments. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 2781-2793	4.4	19
65	Discrepancies between the modeled and proxy-reconstructed response to volcanic forcing over the past millennium: Implications and possible mechanisms. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 7617-7627	4.4	19
64	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	2	18
63	Homogenized Daily Relative Humidity Series in China during 1960–2017. *Advances in Atmospheric Sciences*, **2020**, 37, 318-327	2.9	17

62	Can Top-of-Atmosphere Radiation Measurements Constrain Climate Predictions? Part I: Tuning. *Journal of Climate*, **2013**, 26, 9348-9366	4.4	17
61	Agro-meteorological indices and climate model uncertainty over the UK. *Climatic Change*, **2015**, 128, 113-126	4.5	16
60	Variability of Deep-Ocean Mass Transport: Spectral Shapes and Spatial Scales. *Journal of Climate*, **2000**, 13, 1916-1935	4.4	16
59	Uncertainty levels in predicted patterns of anthropogenic climate change. *Journal of Geophysical Research*, **2000**, 105, 15525-15542		16
58	Attributing human influence on the July 2017 Chinese heatwave: the influence of sea-surface temperatures. *Environmental Research Letters*, **2018**, 13, 114004	6.2	16
57	Underestimated Change of Wet-Bulb Temperatures Over East and South China. *Geophysical Research Letters*, **2020**, 47, e2019GL086140	4.9	15
56	How Much Has the North Atlantic Ocean Overturning Circulation Changed in the Last 50 Years?. *Journal of Climate*, **2014**, 27, 6325-6342	4.4	15
55	Impacts of Anthropogenic Forcings and El Niño on Chinese Extreme Temperatures. *Advances in Atmospheric Sciences*, **2018**, 35, 994-1002	2.9	14
54	Anthropogenic emissions and urbanization increase risk of compound hot extremes in cities. *Nature Climate Change*,	21.4	14
53	Assessing the robustness of zonal mean climate change detection. *Geophysical Research Letters*, **2002**, 29, 26-1-26-4	4.9	13
52	Multi-site evaluation of the JULES land surface model using global and local data. *Geoscientific Model Development*, **2015**, 8, 295-316	6.3	12
51	Anthropogenic Warming has Substantially Increased the Likelihood of July 2017–like Heat Waves over Central Eastern China. *Bulletin of the American Meteorological Society*, **2019**, 100, S91-S95	6.1	11
50	Calibrating climate models using inverse methods: case studies with HadAM3, HadAM3P and HadCM3. *Geoscientific Model Development*, **2017**, 10, 3567-3589	6.3	11
49	Atmospheric science: tropospheric temperature series from satellites. *Nature*, **2004**, 432, 1 p following 572; discussion following 572	50.4	11
48	Contribution of Anthropogenic Climate Change to April–May 2017 Heavy Precipitation over the Uruguay River Basin. *Bulletin of the American Meteorological Society*, **2019**, 100, S37-S41	6.1	10
47	Glacier change along West Antarctica's Marie Byrd Land Sector and links to inter-decadal atmosphere–ocean variability. *Cryosphere*, **2018**, 12, 2461-2479	5.5	10
46	How much has urbanisation affected United Kingdom temperatures?. *Atmospheric Science Letters*, **2019**, 20, e896	2.4	9
45	The Local Aerosol Emission Effect on Surface Shortwave Radiation and Temperatures. *Journal of Advances in Modeling Earth Systems*, **2019**, 11, 806-817	7.1	9

44	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	6.1	9
43	Attribution of Detected Temperature Trends in Southeast Brazil. *Geophysical Research Letters*, **2019**, 46, 8407-8414	4.9	9
42	Carbon accounting for negative emissions technologies. *Climate Policy*, **2021**, 21, 699-717	5.3	9
41	Ocean and land forcing of the record-breaking Dust Bowl heatwaves across central United States. *Nature Communications*, **2020**, 11, 2870	17.4	8
40	Central-Eastern China Persistent Heat Waves: Evaluation of the AMIP Models. *Journal of Climate*, **2018**, 31, 3609-3624	4.4	8
39	Climate Model Simulated Diurnal Cycles in HIRS Clear-Sky Brightness Temperatures. *Journal of Climate*, **2012**, 25, 5845-5863	4.4	8
38	Anthropogenic Influence on 2018 Summer Persistent Heavy Rainfall in Central Western China. *Bulletin of the American Meteorological Society*, **2020**, 101, S65-S70	6.1	7
37	Was the Cold European Winter of 2009/10 Modified by Anthropogenic Climate Change? An Attribution Study. *Journal of Climate*, **2018**, 31, 3387-3410	4.4	7
36	Using longwave HIRS radiances to test climate models. *Climate Dynamics*, **2014**, 43, 1103-1127	4.2	7
35	Using IASI to simulate the total spectrum of outgoing long-wave radiances. *Atmospheric Chemistry and Physics*, **2015**, 15, 6561-6575	6.8	7
34	Anthropogenic Influence on 2019 May June Extremely Low Precipitation in Southwestern China. *Bulletin of the American Meteorological Society*, **2021**, 102, S97-S102	6.1	7
33	Projected near term changes in the East Asian summer monsoon and its uncertainty. *Environmental Research Letters*, **2019**, 14, 084038	6.2	6
32	Near-term prediction of impact-relevant extreme temperature indices. *Climatic Change*, **2015**, 132, 61-76	4.5	6
31	Have human activities changed the frequencies of absolute extreme temperatures in eastern China?. *Environmental Research Letters*, **2018**, 13, 014012	6.2	6
30	Disentangling the causes of the 1816 European year without a summer. *Environmental Research Letters*, **2019**, 14, 094019	6.2	6
29	What is the Uncertainty in Degree-Day Projections due to Different Calibration Methodologies?. *Journal of Climate*, **2017**, 30, 9059-9075	4.4	6
28	Temperature response to external forcing in simulations and reconstructions of the last millennium		6
27	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	6.2	5

26	Understanding Interdependent Climate Change Risks Using a Serious Game. *Bulletin of the American Meteorological Society*, **2020**, 101, E1279-E1300	6.1	5
25	Automated parameter tuning applied to sea ice in a global climate model. *Climate Dynamics*, **2018**, 50, 51-65	4.2	5
24	Anthropogenic and natural causes of twentieth century temperature change. *Space Science Reviews* , **2000**, 94, 337-344	7.5	5
23	Widespread Persistent Extreme Cold Events Over South-East China: Mechanisms, Trends, and Attribution. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2020JD033447	4.4	4
22	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	6.1	4
21	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	6.1	4
20	Multi-site evaluation of the JULES land surface model using global and local data **2014**,		3
19	Anthropogenic Influences on 2019 July Precipitation Extremes Over the Mid□lower Reaches of the Yangtze River. *Frontiers in Environmental Science*, **2020**, 8,	4.8	3
18	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	6.1	3
17	Recent developments in Holocene climate modelling. *Developments in Paleoenvironmental Research* , **2004**, 495-514		3
16	Quantifying the contribution of an individual to making extreme weather events more likely. *Environmental Research Letters*, **2021**, 16, 104040	6.2	2
15	Attributing the 2015/2016 Amazon basin drought to anthropogenic influence. *Climate Resilience and Sustainability*,		2
14	Reduced Probability of 2020 June□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	6.1	2
13	Calibrating Climate Models Using Inverse Methods: Case studies with HadAM3, HadAM3P and HadCM3 **2017**,		1
12	MEETING SUMMARIES. *Bulletin of the American Meteorological Society*, **2005**, 86, 1471-1480	6.1	1
11	Rayleigh-B□ard convection as a tool for studying dust devils. *Atmospheric Science Letters*, **2001**, 2, 132-142	2.4	1
10	Does Model Calibration Reduce Uncertainty in Climate Projections?. *Journal of Climate*, **2022**, 1-39	4.4	1
9	Physical processes of summer extreme rainfall interannual variability in Eastern China□art II: evaluation of CMIP6 models. *Climate Dynamics*,1	4.2	1

8	Natural and Anthropogenic Causes of Recent Climate Change **2001**, 275-290		1
7	Changes in regional wet heatwave in Eurasia during summer (1979–2017). *Environmental Research Letters*, **2021**, 16, 064094	6.2	1
6	Detectable anthropogenic changes in daily-scale circulations driving summer rainfall shifts over eastern China. *Environmental Research Letters*, **2021**, 16, 074044	6.2	1
5	Can downwelling far-infrared radiances over Antarctica be estimated from mid-infrared information?. *Atmospheric Chemistry and Physics*, **2019**, 19, 7927-7937	6.8	0
4	A derivative-free optimisation method for global ocean biogeochemical models. *Geoscientific Model Development*, **2022**, 15, 3537-3554	6.3	0
3	Camelot – a database for climate model output. *Meteorological Applications*, **2000**, 7, 83-90	2.1	
2	Ocean-Atmosphere interaction and climate modelling. *Journal of Experimental Marine Biology and Ecology*, **1995**, 194, 287-289	2.1	
1	Anthropogenic and Natural Causes of Twentieth Century Temperature Change. *Space Sciences Series of ISSI*, **2000**, 337-344	0.1	