E M Fischer

List of Publications by Year in Descending Order

97 papers	11,031 citations	45 h-index	105 g-index
138 ext. papers	13,665 ext. citations	9.5 avg, IF	7.12 L-index

#	Paper	IF	Citations
97	On the Controlling Factors for Globally Extreme Humid Heat. *Geophysical Research Letters*, **2021**, 48, e2021GL096082	4.9	2
96	Robust detection of forced warming in the presence of potentially large climate variability. *Science Advances*, **2021**, 7, eabh4429	14.3	0
95	Climate model projections from the Scenario Model Intercomparison Project (ScenarioMIP) of CMIP6. *Earth System Dynamics*, **2021**, 12, 253-293	4.8	60
94	Urban multi-model climate projections of intense heat in Switzerland. *Climate Services*, **2021**, 22, 100228	3.8	1
93	Very rare heat extremes: quantifying and understanding using ensemble re-initialization. *Journal of Climate*, **2021**, 1-46	4.4	3
92	Increasing probability of record-shattering climate extremes. *Nature Climate Change*, **2021**, 11, 689-695	21.4	40
91	A New Framework for Identifying and Investigating Seasonal Climate Extremes. *Journal of Climate*, **2021**, 34, 7761-7782	4.4	1
90	Lack of Change in the Projected Frequency and Persistence of Atmospheric Circulation Types Over Central Europe. *Geophysical Research Letters*, **2020**, 47, e2019GL086132	4.9	11
89	Volcanic-induced global monsoon drying modulated by diverse El Niño responses. *Science Advances*, **2020**, 6,	14.3	11
88	Past warming trend constrains future warming in CMIP6 models. *Science Advances*, **2020**, 6, eaaz9549	14.3	143
87	Observed extreme precipitation trends and scaling in Central Europe. *Weather and Climate Extremes*, **2020**, 29, 100266	6	13
86	Partitioning climate projection uncertainty with multiple Large Ensembles and CMIP5/6 **2020**,		7
85	Warming of hot extremes alleviated by expanding irrigation. *Nature Communications*, **2020**, 11, 290	17.4	52
84	Comparing interannual variability in three regional single-model initial-condition large ensembles (SMILEs) over Europe. *Earth System Dynamics*, **2020**, 11, 1013-1031	4.8	10
83	Partitioning climate projection uncertainty with multiple large ensembles and CMIP5/6. *Earth System Dynamics*, **2020**, 11, 491-508	4.8	88
82	Late 1980s abrupt cold season temperature change in Europe consistent with circulation variability and long-term warming. *Environmental Research Letters*, **2020**, 15, 094056	6.2	4
81	Climate change now detectable from any single day of weather at global scale. *Nature Climate Change*, **2020**, 10, 35-41	21.4	82

80	Changes in climate extremes in observations and climate model simulations. From the past to the future **2020**, 31-57		6
79	The record-breaking compound hot and dry 2018 growing season in Germany. *Weather and Climate Extremes*, **2020**, 29, 100270	6	31
78	Development of Future Heatwaves for Different Hazard Thresholds. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2019JD032070	4.4	19
77	The effect of univariate bias adjustment on multivariate hazard estimates. *Earth System Dynamics*, **2019**, 10, 31-43	4.8	35
76	Uncovering the Forced Climate Response from a Single Ensemble Member Using Statistical Learning. *Journal of Climate*, **2019**, 32, 5677-5699	4.4	25
75	Event-to-event intensification of the hydrologic cycle from 1.5 ℃ to a 2 ℃ warmer world. *Scientific Reports*, **2019**, 9, 3483	4.9	42
74	Detection of a Climate Change Signal in Extreme Heat, Heat Stress, and Cold in Europe From Observations. *Geophysical Research Letters*, **2019**, 46, 8363-8374	4.9	43
73	Frequency of extreme precipitation increases extensively with event rareness under global warming. *Scientific Reports*, **2019**, 9, 16063	4.9	150
72	Applying big data beyond small problems in climate research. *Nature Climate Change*, **2019**, 9, 196-202	21.4	31
71	Limiting global warming to 1.5 ℃ will lower increases in inequalities of four hazard indicators of climate change. *Environmental Research Letters*, **2019**, 14, 124022	6.2	5
70	Intensification of summer precipitation with shorter time-scales in Europe. *Environmental Research Letters*, **2019**, 14, 124050	6.2	16
69	Will Half a Degree Make a Difference? Robust Projections of Indices of Mean and Extreme Climate in Europe Under 1.5℃, 2℃, and 3℃ Global Warming. *Geophysical Research Letters*, **2018**, 45, 935-944	4.9	65
68	Prospects and Caveats of Weighting Climate Models for Summer Maximum Temperature Projections Over North America. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 4509-4526	4.4	39
67	Heat waves in Portugal: Current regime, changes in future climate and impacts on extreme wildfires. *Science of the Total Environment*, **2018**, 631-632, 534-549	10.2	40
66	Impacts of half a degree additional warming on the Asian summer monsoon rainfall characteristics. *Environmental Research Letters*, **2018**, 13, 044033	6.2	29
65	Robust changes in tropical rainy season length at 1.5 ℃ and 2 ℃. *Environmental Research Letters*, **2018**, 13, 064024	6.2	23
64	Extreme heat waves under 1.5 ℃ and 2 ℃ global warming. *Environmental Research Letters*, **2018**, 13, 054006	6.2	140
63	Influence of blocking on Northern European and Western Russian heatwaves in large climate model ensembles. *Environmental Research Letters*, **2018**, 13, 054015	6.2	66

62	Biased Estimates of Changes in Climate Extremes From Prescribed SST Simulations. *Geophysical Research Letters*, **2018**, 45, 8500-8509	4.9	34
61	Marine heatwaves under global warming. *Nature*, **2018**, 560, 360-364	50.4	393
60	Global Freshwater Availability Below Normal Conditions and Population Impact Under 1.5 and 2□C Stabilization Scenarios. *Geophysical Research Letters*, **2018**, 45, 9803-9813	4.9	21
59	Changing seasonality of moderate and extreme precipitation events in the Alps. *Natural Hazards and Earth System Sciences*, **2018**, 18, 2047-2056	3.9	24
58	Changes in extremely hot days under stabilized 1.5 and 2.0 □C global warming scenarios as simulated by the HAPPI multi-model ensemble. *Earth System Dynamics*, **2018**, 9, 299-311	4.8	24
57	Extreme heat-related mortality avoided under Paris Agreement goals. *Nature Climate Change*, **2018**, 8, 551-553	21.4	24
56	Midlatitude atmospheric circulation responses under 1.5 and 2.0 □C warming and implications for regional impacts. *Earth System Dynamics*, **2018**, 9, 359-382	4.8	19
55	A climate model projection weighting scheme accounting for performance and interdependence. *Geophysical Research Letters*, **2017**, 44, 1909	4.9	135
54	Understanding the regional pattern of projected future changes in extreme precipitation. *Nature Climate Change*, **2017**, 7, 423-427	21.4	393
53	Reconciling controversies about the Tglobal warming hiatusT *Nature*, **2017**, 545, 41-47	50.4	252
52	Comparing Australian heat waves in the CMIP5 models through cluster analysis. *Journal of Geophysical Research D: Atmospheres*, **2017**, 122, 3266-3281	4.4	16
51	The influence of internal climate variability on heatwave frequency trends. *Environmental Research Letters*, **2017**, 12, 044005	6.2	22
50	Emergent Constraints in Climate Projections: A Case Study of Changes in High-Latitude Temperature Variability. *Journal of Climate*, **2017**, 30, 3655-3670	4.4	25
49	Potential to Constrain Projections of Hot Temperature Extremes. *Journal of Climate*, **2017**, 30, 9949-9964	4.4	15
48	Changes in extremely hot days under stabilized 1.5 □C and 2.0 □C global warming scenarios as simulated by the HAPPI multi-model ensemble **2017**,		2
47	Future local climate unlike currently observed anywhere. *Environmental Research Letters*, **2017**, 12, 084004	6.2	14
46	Models are likely to underestimate increase in heavy rainfall in the extratropical regions with high rainfall intensity. *Geophysical Research Letters*, **2017**, 44, 7401-7409	4.9	16
45	Improved Consistency of Climate Projections over Europe after Accounting for Atmospheric Circulation Variability. *Journal of Climate*, **2017**, 30, 7271-7291	4.4	11

44	Separating climate change signals into thermodynamic, lapse-rate and circulation effects: theory and application to the European summer climate. *Climate Dynamics*, **2017**, 48, 3425-3440	4.2	67
43	Half a degree additional warming, prognosis and projected impacts (HAPPI): background and experimental design. *Geoscientific Model Development*, **2017**, 10, 571-583	6.3	162
42	Science and policy characteristics of the Paris Agreement temperature goal. *Nature Climate Change*, **2016**, 6, 827-835	21.4	338
41	Observed heavy precipitation increase confirms theory and early models. *Nature Climate Change*, **2016**, 6, 986-991	21.4	295
40	Percentile indices for assessing changes in heavy precipitation events. *Climatic Change*, **2016**, 137, 201-216	4.5	140
39	Poorest countries experience earlier anthropogenic emergence of daily temperature extremes. *Environmental Research Letters*, **2016**, 11, 055007	6.2	77
38	A scientific critique of the two-degree climate change target. *Nature Geoscience*, **2016**, 9, 13-18	18.3	209
37	Differential climate impacts for policy-relevant limits to global warming: the case of 1.5 °C and 2 °C. *Earth System Dynamics*, **2016**, 7, 327-351	4.8	377
36	Emergence of heat extremes attributable to anthropogenic influences. *Geophysical Research Letters*, **2016**, 43, 3438-3443	4.9	46
35	Emerging trends in heavy precipitation and hot temperature extremes in Switzerland. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 2626-2637	4.4	78
34	Reconciling observed and modeled temperature and precipitation trends over Europe by adjusting for circulation variability. *Geophysical Research Letters*, **2016**, 43, 8189-8198	4.9	24
33	Anthropogenic contribution to global occurrence of heavy-precipitation and high-temperature extremes. *Nature Climate Change*, **2015**, 5, 560-564	21.4	619
32	Contributions of atmospheric circulation variability and data coverage bias to the warming hiatus. *Geophysical Research Letters*, **2015**, 42, 2385-2391	4.9	20
31	The influence of natural variability and interpolation errors on bias characterization in RCM simulations. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 10,180	4.4	26
30	The timing of anthropogenic emergence in simulated climate extremes. *Environmental Research Letters*, **2015**, 10, 094015	6.2	81
29	Top ten European heatwaves since 1950 and their occurrence in the coming decades. *Environmental Research Letters*, **2015**, 10, 124003	6.2	264
28	Site-Specific Conjugation of Monomethyl Auristatin E to Anti-CD30 Antibodies Improves Their Pharmacokinetics and Therapeutic Index in Rodent Models. *Molecular Pharmaceutics*, **2015**, 12, 1863-71	5.6	68
27	Observations: Atmosphere and Surface **2014**, 159-254		218

26	The potential of pattern scaling for projecting temperature-related extreme indices. *International Journal of Climatology*, **2014**, 34, 18-26	3.5	13
25	Detection of spatially aggregated changes in temperature and precipitation extremes. *Geophysical Research Letters*, **2014**, 41, 547-554	4.9	156
24	Sensitivity of European extreme daily temperature return levels to projected changes in mean and variance. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 3032-3044	4.4	7
23	Models agree on forced response pattern of precipitation and temperature extremes. *Geophysical Research Letters*, **2014**, 41, 8554-8562	4.9	111
22	CMIP5 Climate Model Analyses: Climate Extremes in the United States. *Bulletin of the American Meteorological Society*, **2014**, 95, 571-583	6.1	233
21	Declining pine growth in Central Spain coincides with increasing diurnal temperature range since the 1970s. *Global and Planetary Change*, **2013**, 107, 177-185	4.2	26
20	Improved simulation of extreme precipitation in a high-resolution atmosphere model. *Geophysical Research Letters*, **2013**, 40, 5803-5808	4.9	76
19	The usefulness of different realizations for the model evaluation of regional trends in heat waves. *Geophysical Research Letters*, **2013**, 40, 5793-5797	4.9	29
18	Robust spatially aggregated projections of climate extremes. *Nature Climate Change*, **2013**, 3, 1033-1038	21.4	339
17	Robust projections of combined humidity and temperature extremes. *Nature Climate Change*, **2013**, 3, 126-130	21.4	148
16	Large-Scale Atmospheric Circulation Driving Extreme Climate Events in the Mediterranean and its Related Impacts **2012**, 347-417		20
15	Drought-induced decline in Mediterranean truffle harvest. *Nature Climate Change*, **2012**, 2, 827-829	21.4	78
14	Contrasting urban and rural heat stress responses to climate change. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	134
13	Changes in European summer temperature variability revisited. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	91
12	Quantifying uncertainties in projections of extremes□ perturbed land surface parameter experiment. *Climate Dynamics*, **2011**, 37, 1381-1398	4.2	38
11	The hot summer of 2010: redrawing the temperature record map of Europe. *Science*, **2011**, 332, 220-4	33.3	923
10	Consistent geographical patterns of changes in high-impact European heatwaves. *Nature Geoscience*, **2010**, 3, 398-403	18.3	634
9	A Review of the European Summer Heat Wave of 2003. *Critical Reviews in Environmental Science and Technology*, **2010**, 40, 267-306	11.1	409

8	Future changes in daily summer temperature variability: driving processes and role for temperature extremes. *Climate Dynamics*, **2009**, 33, 917-935	4.2	190
7	Contribution of land-atmosphere coupling to recent European summer heat waves. *Geophysical Research Letters*, **2007**, 34,	4.9	432
6	European climate response to tropical volcanic eruptions over the last half millennium. *Geophysical Research Letters*, **2007**, 34,	4.9	258
5	Soil Moisture–Atmosphere Interactions during the 2003 European Summer Heat Wave. *Journal of Climate*, **2007**, 20, 5081-5099	4.4	573
4	Chapter 1 Mediterranean climate variability over the last centuries: A review. *Developments in Earth and Environmental Sciences*, **2006**, 4, 27-148		87
3	Representing the Urban Heat Island Effect in Future Climates		2
2	Climate model projections from the Scenario Model Intercomparison Project (ScenarioMIP) of CMIP6		4
1	Differential climate impacts for policy-relevant limits to global warming: the case of 1.5 °C and 2 °C		31