Andreas Prein

List of Publications by Year
in descending order

51 papers	4,853 citations	218592 26 h-index	189801 50 g-index
65 all docs	65 docs citations	65 times ranked	4731 citing authors

#	Article	IF	Citations
1	The conterminous United States are projected to become more prone to flash floods in a high-end emissions scenario. Communications Earth & Environment, 2022, 3, .	2.6	17
2	Subâ€Seasonal Predictability of North American Monsoon Precipitation. Geophysical Research Letters, 2022, 49, .	1.5	4
3	The Character and Changing Frequency of Extreme California Fire Weather. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	2
4	On the role of atmospheric simulations horizontal grid spacing for flood modeling. Climate Dynamics, 2022, 59, 3167-3174.	1.7	3
5	The response of tropical cyclone intensity to changes in environmental temperature. Weather and Climate Dynamics, 2022, 3, 693-711.	1.2	3
6	Populated regional climate models (Pop-RCMs): The next frontier in regional climate modeling. , 2022, 1, e0000042.		3
7	New hourly extreme precipitation regions and regional annual probability estimates for the <scp>UK</scp>. International Journal of Climatology, 2021, 41, 582-600.	1.5	16
8	Anthropogenic intensification of short-duration rainfall extremes. Nature Reviews Earth & Environment, 2021, 2, 107-122.	12.2	279
9	Added value of kilometer-scale modeling over the third pole region: a CORDEX-CPTP pilot study. Climate Dynamics, 2021, 57, 1673-1687.	1.7	60
10	Dynamic and thermodynamic impacts of climate change on organized convection in Alaska. Climate Dynamics, 2021, 56, 2569-2593.	1.7	8
11	Towards advancing scientific knowledge of climate change impacts on short-duration rainfall extremes. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20190542.	1.6	56
12	Intensification of short-duration rainfall extremes and implications for flood risk: current state of the art and future directions. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20190541.	1.6	44
13	Sensitivity of organized convective storms to model grid spacing in current and future climates. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20190546.	1.6	52
14	Challenges and outlook for convection-permitting climate modelling. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20190547.	1.6	67
15	U.S. Extreme Precipitation Weather Types Increased in Frequency During the 20th Century. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034287.	1.2	21
16	Dryline characteristics in North Americaâ€™s historical and future climates. Climate Dynamics, 2021, 57, 2171-2188.	1.7	6
17	A Benchmark to Test Generalization Capabilities of Deep Learning Methods to Classify Severe Convective Storms in a Changing Climate. Earth and Space Science, 2021, 8, e2020EA001490.	1.1	15
18	A new mechanism for warm-season precipitation response to global warming based on convection-permitting simulations. Climate Dynamics, 2020, 55, 343-368.	1.7	84

#	Article	IF	Citations
19	Simulating the convective precipitation diurnal cycle in North Americaâ€™s current and future climate. Climate Dynamics, 2020, 55, 369-382.	1.7	33
20	Simulating North American mesoscale convective systems with a convection-permitting climate model. Climate Dynamics, 2020, 55, 95-110.	1.7	125
21	Linking Global Changes of Snowfall and Wet-Bulb Temperature. Journal of Climate, 2020, 33, 39-59.	1.2	21
22	Recent Trends in the Near-Surface Climatology of the Northern North American Great Plains. Journal of Climate, 2020, 33, 461-475.	1.2	12
23	Kilometer-scale modeling projects a tripling of Alaskan convective storms in future climate. Climate Dynamics, 2020, 55, 3543-3564.	1.7	20
24	Extreme-value analysis for the characterization of extremes in water resources: A generalized workflow and case study on New Mexico monsoon precipitation. Weather and Climate Extremes, 2020, 29, 100260.	1.6	14
25	Updraft and Downdraft Core Size and Intensity as Revealed by Radar Wind Profilers: MCS Observations and Idealized Model Comparisons. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031774.	1.2	34
26	Retrieval of Cloud Liquid Water Using Microwave Signals from LEO Satellites: A Feasibility Study through Simulations. Atmosphere, 2020, 11, 460.	1.0	5
27	Increased melting level height impacts surface precipitation phase and intensity. Nature Climate Change, 2020, 10, 771-776.	8.1	47
28	Regional climate downscaling over Europe: perspectives from the EURO-CORDEX community. Regional Environmental Change, 2020, 20, 1.	1.4	227
29	Uncertainties in Future U.S. Extreme Precipitation From Downscaled Climate Projections. Geophysical Research Letters, 2020, 47, e2019GL086797.	1.5	59
30	Mesoscale Convective System Precipitation Characteristics over East Asia. Part I: Regional Differences and Seasonal Variations. Journal of Climate, 2020, 33, 9271-9286.	1.2	26
31	Moisture Attribution and Sensitivity Analysis of a Winter Tornado Outbreak. Weather and Forecasting, 2020, 35, 1263-1288.	0.5	8
32	Investigating the sensitivity to resolving aerosol interactions in downscaling regional model experiments with WRFv3.8.1 over Europe. Geoscientific Model Development, 2020, 13, 2511-2532.	1.3	12
33	Separating Dynamic and Thermodynamic Impacts of Climate Change on Daytime Convective Development over Land. Journal of Climate, 2019, 32, 5213-5234.	1.2	9
34	Simulating North American Weather Types With Regional Climate Models. Frontiers in Environmental Science, 2019, 7, .	1.5	29
35	Can We Constrain Uncertainty in Hydrologic Cycle Projections?. Geophysical Research Letters, 2019, 46, 3911-3916.	1.5	23
36	Projected increases and shifts in rain-on-snow flood risk over western North America. Nature Climate Change, 2018, 8, 808-812.	8.1	261

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37	Global estimates of damaging hail hazard. Weather and Climate Extremes, 2018, 22, 10-23.	1.6	73
38	Impacts of uncertainties in European gridded precipitation observations on regional climate analysis. International Journal of Climatology, 2017, 37, 305-327.	1.5	194
39	The future intensification of hourly precipitation extremes. Nature Climate Change, 2017, 7, 48-52.	8.1	591
40	Future Changes in European Severe Convection Environments in a Regional Climate Model Ensemble. Journal of Climate, 2017, 30, 6771-6794.	1.2	82
41	Continental-scale convection-permitting modeling of the current and future climate of North America. Climate Dynamics, 2017, 49, 71-95.	1.7	362
42	Clustering of Observed Diurnal Cycles of Precipitation over the United States for Evaluation of a WRF Multiphysics Regional Climate Ensemble. Journal of Climate, 2017, 30, 9267-9286.	1.2	24
43	Increased rainfall volume from future convective storms in the US. Nature Climate Change, 2017, 7, 880-884.	8.1	211
44	Challenges and Advances in Convection-Permitting Climate Modeling. Bulletin of the American Meteorological Society, 2017, 98, 1027-1030.	1.7	30
45	Climate change impacts on the power generation potential of a European mid-century wind farms scenario. Environmental Research Letters, 2016, 11, 034013.	2.2	120
46	Running dry: The U.S. Southwest's drift into a drier climate state. Geophysical Research Letters, 2016, 43, 1272-1279.	1.5	119
47	Precipitation in the EURO-CORDEX \$\$0.11^{circ }\$\$ 0 . 11 â˜ and \$\$0.44^{circ }\$\$ 0 . 44 â˜ simulations: high resolution, high benefits?. Climate Dynamics, 2016, 46, 383-412.	1.7	215
48	A review on regional convectionâ€permitting climate modeling: Demonstrations, prospects, and challenges. Reviews of Geophysics, 2015, 53, 323-361.	9.0	907
49	Evaluation of CMIP5 Models in the Context of Dynamical Downscaling over Europe. Journal of Climate, 2015, 28, 5575-5582.	1.2	32
50	Importance of Regional Climate Model Grid Spacing for the Simulation of Heavy Precipitation in the Colorado Headwaters. Journal of Climate, 2013, 26, 4848-4857.	1.2	102
51	The INTENSE project: using observations and models to understand the past, present and future of sub-daily rainfall extremes. Advances in Science and Research, 0, 15, 117-126.	1.0	59