Chris Kilsby

List of Publications by Year
in descending order

67 papers	4,144 citations	126907 33 h-index	114465 63 g-index
68 all docs	68 docs citations	68 times ranked	4302 citing authors

#	Article	IF	Citations
1	A daily weather generator for use in climate change studies. Environmental Modelling and Software, 2007, 22, 1705-1719.	4.5	376
2	A regional frequency analysis of United Kingdom extreme rainfall from 1961 to 2000. International Journal of Climatology, 2003, 23, 1313-1334.	3.5	293
3	Future heat-waves, droughts and floods in 571 European cities. Environmental Research Letters, 2018, 13, 034009.	5.2	242
4	RainSim: A spatialâ€"temporal stochastic rainfall modelling system. Environmental Modelling and Software, 2008, 23, 1356-1369.	4.5	192
5	Using regional climate model data to simulate historical and future river flows in northwest England. Climatic Change, 2007, 80, 337-367.	3.6	178
6	Modeling the impacts of climatic change and variability on the reliability, resilience, and vulnerability of a water resource system. Water Resources Research, 2003, 39, .	4.2	161
7	New estimates of future changes in extreme rainfall across the UK using regional climate model integrations. 1. Assessment of control climate. Journal of Hydrology, 2005, 300, 212-233.	5.4	160
8	New estimates of future changes in extreme rainfall across the UK using regional climate model integrations. 2. Future estimates and use in impact studies. Journal of Hydrology, 2005, 300, 234-251.	5.4	147
9	Using satellite altimetry data to augment flow estimation techniques on the Mekong River. Hydrological Processes, 2010, 24, 3811-3825.	2.6	129
10	A weather-type conditioned multi-site stochastic rainfall model for the generation of scenarios of climatic variability and change. Journal of Hydrology, 2005, 308, 50-66.	5.4	117
11	Downscaling transient climate change using a Neymanâ€"Scott Rectangular Pulses stochastic rainfall model. Journal of Hydrology, 2010, 381, 18-32.	5.4	100
12	Quantifying and Mitigating Windâ€Induced Undercatch in Rainfall Measurements. Water Resources Research, 2018, 54, 3863-3875.	4.2	98
13	Implications of changes in seasonal and annual extreme rainfall. Geophysical Research Letters, 2003, 30, .	4.0	96
14	Predicting rainfall statistics in England and Wales using atmospheric circulation variables. International Journal of Climatology, 1998, 18, 523-539.	3.5	93
15	A space-time Neyman-Scott model of rainfall: Empirical analysis of extremes. Water Resources Research, 2002, 38, 6-1-6-14.	4.2	89
16	Modelling the impacts of projected future climate change on water resources in north-west England. Hydrology and Earth System Sciences, 2007, 11, 1115-1126.	4.9	88
17	A weather-type approach to analysing water resource drought in the Yorkshire region from 1881 to 1998. Journal of Hydrology, 2002, 262, 177-192.	5.4	81
18	Airborne observations of the physical and chemical characteristics of the Kuwait oil smoke plume. Nature, 1991, 353, 617-621.	27.8	80

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19	Precipitation and the North Atlantic Oscillation: a study of climatic variability in northern England. International Journal of Climatology, 2002, 22, 843-866.	3.5	77
20	Using probabilistic climate change information from a multimodel ensemble for water resources assessment. Water Resources Research, 2009, 45, .	4.2	76
21	An assessment of changes in seasonal and annual extreme rainfall in the UK between 1961 and 2009. International Journal of Climatology, 2013, 33, 1178-1194.	3.5	73
22	The blue-green path to urban flood resilience. Blue-Green Systems, 2020, 2, 28-45.	2.0	70
23	Towards riskâ€based water resources planning in England and Wales under a changing climate. Water and Environment Journal, 2012, 26, 118-129.	2.2	65
24	Hydrological impacts of climate change on the Tejo and Guadiana Rivers. Hydrology and Earth System Sciences, 2007, 11, 1175-1189.	4.9	62
25	Application of a stochastic weather generator to assess climate change impacts in a semi-arid climate: The Upper Indus Basin. Journal of Hydrology, 2014, 517, 1019-1034.	5.4	60
26	A stochastic rainfall model for the assessment of regional water resource systems under changed climatic condition. Hydrology and Earth System Sciences, 2000, 4, 263-281.	4.9	57
27	Integrated Approach to Assess the Resilience of Future Electricity Infrastructure Networks to Climate Hazards. IEEE Systems Journal, 2018, 12, 3169-3180.	4.6	57
28	Objective classification of extreme rainfall regions for the <scp>UK</scp> and updated estimates of trends in regional extreme rainfall. International Journal of Climatology, 2014, 34, 751-765.	3.5	52
29	A stochastic model for the spatialâ€temporal simulation of nonhomogeneous rainfall occurrence and amounts. Water Resources Research, 2010, 46, .	4.2	49
30	Probabilistic spatial risk assessment of heat impacts and adaptations for London. Climatic Change, 2014, 124, 105-117.	3.6	49
31	Implications of Using Global Digital Elevation Models for Flood Risk Analysis in Cities. Water Resources Research, 2020, 56, e2020WR028241.	4.2	41
32	Assessment of Runoff Sensitivity in the Upper Indus Basin to Interannual Climate Variability and Potential Change Using MODIS Satellite Data Products. Mountain Research and Development, 2012, 32, 16.	1.0	36
33	Flood modelling for cities using Cloud computing. Journal of Cloud Computing: Advances, Systems and Applications, 2013, 2, .	3.9	36
34	Urban Flood Simulation Using Synthetic Storm Drain Networks. Water (Switzerland), 2017, 9, 925.	2.7	32
35	Pluvial Flooding in European Citiesâ€"A Continental Approach to Urban Flood Modelling. Water (Switzerland), 2017, 9, 296.	2.7	32
36	Fineâ€scale regional climate patterns in the Guianas, tropical South America, based on observations and reanalysis data. International Journal of Climatology, 2012, 32, 1665-1689.	3.5	31

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37	A new precipitation and drought climatology based on weather patterns. International Journal of Climatology, 2018, 38, 630-648.	3.5	31
38	Assessing the threat of future megadrought in Iberia. International Journal of Climatology, 2017, 37, 5024-5034.	3.5	29
39	Water-Vapour Continuum Absorption In the Tropics: Aircraft Measurements and Model Comparisons. Quarterly Journal of the Royal Meteorological Society, 1992, 118, 715-748.	2.7	28
40	Opportunities from Remote Sensing for Supporting Water Resources Management in Village/Valley Scale Catchments in the Upper Indus Basin. Water Resources Management, 2012, 26, 845-871.	3.9	28
41	Understanding Persistence to Avoid Underestimation of Collective Flood Risk. Water (Switzerland), 2016, 8, 152.	2.7	27
42	Implications of climate change for thermal discomfort on underground railways. Transportation Research, Part D: Transport and Environment, 2014, 30, 1-9.	6.8	26
43	Dry getting drier â€" The future of transnational river basins in Iberia. Journal of Hydrology: Regional Studies, 2017, 12, 238-252.	2.4	25
44	Development of a system for automated setup of a physically-based, spatially-distributed hydrological model for catchments in Great Britain. Environmental Modelling and Software, 2018, 108, 102-110.	4.5	24
45	Perturbing a Weather Generator using change factors derived from Regional Climate Model simulations. Nonlinear Processes in Geophysics, 2011, 18, 503-511.	1.3	22
46	Spatial analysis of the reliability of transport networks subject to rainfallâ€induced landslides. Hydrological Processes, 2008, 22, 3349-3360.	2.6	21
47	A Detailed Cloud Fraction Climatology of the Upper Indus Basin and Its Implications for Near-Surface Air Temperature*. Journal of Climate, 2015, 28, 3537-3556.	3.2	21
48	Improving bank erosion modelling at catchment scale by incorporating temporal and spatial variability. Earth Surface Processes and Landforms, 2018, 43, 124-133.	2.5	20
49	Improved hydrological modelling of urban catchments using runoff coefficients. Journal of Hydrology, 2021, 594, 125884.	5.4	20
50	Improving sub-seasonal forecast skill of meteorological drought: a weather pattern approach. Natural Hazards and Earth System Sciences, 2020, 20, 107-124.	3.6	18
51	Adaptation of water resource systems to an uncertain future. Hydrology and Earth System Sciences, 2016, 20, 1869-1884.	4.9	17
52	A Probabilistic Analysis of Surface Water Flood Risk in London. Risk Analysis, 2018, 38, 1169-1182.	2.7	17
53	Simulating multimodal seasonality in extreme daily precipitation occurrence. Journal of Hydrology, 2016, 537, 117-129.	5.4	15
54	Downscaling climate change of water availability, sediment yield and extreme events: Application to a Mediterranean climate basin. International Journal of Climatology, 2019, 39, 2947-2963.	3.5	14

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55	Rainfall in Iberian transnational basins: a drier future for the Douro, Tagus and Guadiana?. Climatic Change, 2016, 135, 467-480.	3.6	12
56	UP Modelling System for large scale hydrology: deriving large-scale physically-based parameters for the Arkansas-Red River basin. Hydrology and Earth System Sciences, 1999, 3, 125-136.	4.9	9
57	Weekly to multiâ€month persistence in sets of daily weather patterns over Europe and the North Atlantic Ocean. International Journal of Climatology, 2019, 39, 2041-2056.	3.5	9
58	Stormwater Detention Ponds in Urban Catchmentsâ€"Analysis and Validation of Performance of Ponds in the Ouseburn Catchment, Newcastle upon Tyne, UK. Water (Switzerland), 2021, 13, 2521.	2.7	6
59	Partial afforestation has uncertain effect on flood frequency and peak discharge at large catchment scales (100â€"1000 km²), southâ€central Chile. Hydrological Processes, 2022, 36, .	2.6	5
60	Physically-based modelling, uncertainty, and pragmatism â€" Comment on: â€˜SystÃ¨me Hydrologique EuropeÃ©n (SHE): review and perspectives after 30 years development in distributed physically-based hydrological modellingâ€™ by Jens Christian Refsgaard, BÃ¸rge Storm and Thomas Clausen. Hydrology Research, 2012, 43, 945-947.	2.7	4
61	Downscaling climate change of mean climatology and extremes of precipitation and temperature: Application to a Mediterranean climate basin. International Journal of Climatology, 2019, 39, 4985-5005.	3.5	4
62	Incorporating topographic variability into a simple regional snowmelt model. Hydrological Processes, 2004, 18, 3371-3390.	2.6	3
63	Briefing: Wrapt â€" software for analysing UKCP09 weather generator output. Water Management, 2014, 167, 318-321.	1.2	3
64	Climate models' value. New Scientist, 2008, 201, 16.	0.0	2
65	Role of hydrology in managing consequences of a changing global environment. Hydrology Research, 2012, 43, 548-550.	2.7	2
66	Analysing changes in short-duration extreme rainfall events. Water Management, 2016, 169, 201-211.	1.2	1
67	Coupled surface/sub-surface modelling to investigate the potential for blueâ€"green infrastructure to deliver urban flood risk reduction benefits. , 2020, , 37-50.		1