Fredrik Wetterhall

List of Publications by Citations

62 papers	3,951 citations	31 h-index	62 g-index
71 ext. papers	4,455 ext. citations	4.9 avg, IF	5.25 L-index

#	Paper	IF	Citations
62	Precipitation downscaling under climate change: Recent developments to bridge the gap between dynamical models and the end user. *Reviews of Geophysics*, **2010**, 48,	23.1	1021
61	Operational early warning systems for water-related hazards in Europe. *Environmental Science and Policy*, **2012**, 21, 35-49	6.2	167
60	Distribution-based scaling to improve usability of regional climate model projections for hydrological climate change impacts studies **2010**, 41, 211-229		167
59	Deriving global flood hazard maps of fluvial floods through a physical model cascade. *Hydrology and Earth System Sciences*, **2012**, 16, 4143-4156	5.5	143
58	Evaluation of different downscaling techniques for hydrological climate-change impact studies at the catchment scale. *Climate Dynamics*, **2011**, 37, 2087-2105	4.2	139
57	Technical review of large-scale hydrological models for implementation in operational flood forecasting schemes on continental level. *Environmental Modelling and Software*, **2016**, 75, 68-76	5.2	127
56	Toward Global Drought Early Warning Capability: Expanding International Cooperation for the Development of a Framework for Monitoring and Forecasting. *Bulletin of the American Meteorological Society*, **2013**, 94, 776-785	6.1	122
55	The monetary benefit of early flood warnings in Europe. *Environmental Science and Policy*, **2015**, 51, 278-291	4.2	116
54	Statistical precipitation downscaling in central Sweden with the analogue method. *Journal of Hydrology*, **2005**, 306, 174-190	6	107
53	Evaluation of ensemble streamflow predictions in Europe. *Journal of Hydrology*, **2014**, 517, 913-922	6	100
52	The 2010–2011 drought in the Horn of Africa in ECMWF reanalysis and seasonal forecast products. *International Journal of Climatology*, **2013**, 33, 1720-1729	3.5	97
51	How do I know if my forecasts are better? Using benchmarks in hydrological ensemble prediction. *Journal of Hydrology*, **2015**, 522, 697-713	6	94
50	Tracking the uncertainty in flood alerts driven by grand ensemble weather predictions. *Meteorological Applications*, **2009**, 16, 91-101	2.1	88
49	Visualizing probabilistic flood forecast information: expert preferences and perceptions of best practice in uncertainty communication. *Hydrological Processes*, **2013**, 27, 132-146	3.3	85
48	Daily precipitation-downscaling techniques in three Chinese regions. *Water Resources Research*, **2006**, 42,	5.4	83
47	Modelling climate impact on floods with ensemble climate projections. *Quarterly Journal of the Royal Meteorological Society*, **2013**, 139, 282-297	6.4	73
46	Seasonal forecasts of droughts in African basins using the Standardized Precipitation Index. *Hydrology and Earth System Sciences*, **2013**, 17, 2359-2373	5.5	71

45	Forecasting droughts in East Africa. *Hydrology and Earth System Sciences*, **2014**, 18, 611-620	5.5	69
44	Comparison of drought indicators derived from multiple data sets over Africa. *Hydrology and Earth System Sciences*, **2014**, 18, 1625-1640	5.5	57
43	Skilful seasonal forecasts of streamflow over Europe?. *Hydrology and Earth System Sciences*, **2018**, 22, 2057-2072	5.5	57
42	The Potential Predictability of Fire Danger Provided by Numerical Weather Prediction. *Journal of Applied Meteorology and Climatology*, **2016**, 55, 2469-2491	2.7	56
41	Statistical downscaling of daily precipitation over Sweden using GCM output. *Theoretical and Applied Climatology*, **2009**, 96, 95-103	3	55
40	Conditioning model output statistics of regional climate model precipitation on circulation patterns. *Nonlinear Processes in Geophysics*, **2012**, 19, 623-633	2.9	49
39	HESS Opinions "Forecaster priorities for improving probabilistic flood forecasts". *Hydrology and Earth System Sciences*, **2013**, 17, 4389-4399	5.5	47
38	Seasonality properties of four statistical-downscaling methods in central Sweden. *Theoretical and Applied Climatology*, **2007**, 87, 123-137	3	45
37	Global meteorological drought Part 2: Seasonal forecasts. *Hydrology and Earth System Sciences*, **2014**, 18, 2669-2678	5.5	44
36	Coupling ensemble weather predictions based on TIGGE database with Grid-Xinanjiang model for flood forecast. *Advances in Geosciences*,29, 61-67		39
35	The potential value of seasonal forecasts in a changing climate in southern Africa. *Hydrology and Earth System Sciences*, **2014**, 18, 1525-1538	5.5	38
34	Seasonal predictions of agro-meteorological drought indicators for the Limpopo basin. *Hydrology and Earth System Sciences*, **2015**, 19, 2577-2586	5.5	37
33	Using ensemble climate projections to assess probabilistic hydrological change in the Nordic region. *Natural Hazards and Earth System Sciences*, **2011**, 11, 2295-2306	3.9	33
32	Climate impacts on river flow: projections for the Medway catchment, UK, with UKCP09 and CATCHMOD. *Hydrological Processes*, **2010**, 24, 3476-3489	3.3	31
31	Willingness-to-pay for a probabilistic flood forecast: a risk-based decision-making game. *Hydrology and Earth System Sciences*, **2016**, 20, 3109-3128	5.5	31
30	Global meteorological drought Part 1: Probabilistic monitoring. *Hydrology and Earth System Sciences*, **2014**, 18, 2657-2667	5.5	30
29	Ensemble flood forecasting: Current status and future opportunities. *Wiley Interdisciplinary Reviews: Water*, **2020**, 7, e1432	5.7	29
28	The extreme runoff index for flood early warning in Europe. *Natural Hazards and Earth System Sciences*, **2014**, 14, 1505-1515	3.9	26

27	On the Operational Implementation of the European Flood Awareness System (EFAS) **2016**, 313-348		25
26	Prediction of the Caspian Sea level using ECMWF seasonal forecasts and reanalysis. *Theoretical and Applied Climatology*, **2014**, 117, 41-60	3	23
25	Using the Fire Weather Index (FWI) to improve the estimation of fire emissions from fire radiative power (FRP) observations. *Atmospheric Chemistry and Physics*, **2018**, 18, 5359-5370	6.8	23
24	Assessment of a 1-hour gridded precipitation dataset to drive a hydrological model: a case study of the summer 2007 floods in the Upper Severn, UK **2013**, 44, 89-105		22
23	Investigating the application of climate models in flood projection across the UK. *Hydrological Processes*, **2014**, 28, 2810-2823	3.3	19
22	Building a Multimodel Flood Prediction System with the TIGGE Archive. *Journal of Hydrometeorology*, **2016**, 17, 2923-2940	3.7	18
21	The benefit of seamless forecasts for hydrological predictions over Europe. *Hydrology and Earth System Sciences*, **2018**, 22, 3409-3420	5.5	18
20	Characterising droughts in Central America with uncertain hydro-meteorological data. *Theoretical and Applied Climatology*, **2019**, 137, 2125-2138	3	17
19	Potential of Pan-European Seasonal Hydrometeorological Drought Forecasts Obtained from a Multihazard Early Warning System. *Bulletin of the American Meteorological Society*, **2020**, 101, E368-E393	6.1	17
18	The extreme forecast index at the seasonal scale. *Atmospheric Science Letters*, **2013**, 14, 256-262	2.4	16
17	Forecast convergence score: a forecaster's approach to analysing hydro-meteorological forecast systems. *Advances in Geosciences*,29, 27-32		16
16	Effects of temporal resolution of input precipitation on the performance of hydrological forecasting. *Advances in Geosciences*,29, 21-25		15
15	How do I know if I've improved my continental scale flood early warning system?. *Environmental Research Letters*, **2017**, 12, 044006	6.2	14
14	Improving Forecasts of Biomass Burning Emissions with the Fire Weather Index. *Journal of Applied Meteorology and Climatology*, **2017**, 56, 2789-2799	2.7	13
13	GloFAS-ERA5 operational global river discharge reanalysis 1979–present		13
12	Hydrological drought forecasts outperform meteorological drought forecasts. *Environmental Research Letters*, **2020**, 15, 084010	6.2	12
11	Imbalanced land surface water budgets in a numerical weather prediction system. *Geophysical Research Letters*, **2015**, 42, 4411-4417	4.9	11
10	Advances in the application and utility of subseasonal-to-seasonal predictions. *Bulletin of the American Meteorological Society*, **2021**, 1-57	6.1	9

List of Publications

9	Model inter-comparison between statistical and dynamic model assessments of the long-term stability of blanket peat in Great Britain (19402099). *Climate Research*, **2010**, 45, 227-248	1.6	9
8	Seasonal predictions of agro-meteorological drought indicators for the Limpopo basin **2014**,		5
7	Global Flood Forecasting for Averting Disasters Worldwide. *Geophysical Monograph Series*, **2018**, 205-228	1.1	4
6	Combining fire radiative power observations with the fire weather index improves the estimation of fire emissions **2017**,		3
5	Skilful seasonal forecasts of streamflow over Europe?		3
4	Hydrological Challenges in Meteorological Post-processing **2019**, 239-253		3
3	Hydrological Ensemble Prediction Systems Around the Globe **2019**, 1187-1221		2
2	The benefit of seamless forecasts for hydrological predictions over Europe		2
1	Hydrological Challenges in Meteorological Post-processing **2016**, 1-15		