Justin Sheffield

List of Publications by Year
in descending order

185 papers	29,489 citations	7096 78 h-index	5120 166 g-index
218 all docs	218 docs citations	218 times ranked	23266 citing authors

#	Article	IF	Citations
1	Global warming and changes in drought. Nature Climate Change, 2014, 4, 17-22.	18.8	2,231
2	Recent decline in the global land evapotranspiration trend due to limited moisture supply. Nature, 2010, 467, 951-954.	27.8	1,771
3	Development of a 50-Year High-Resolution Global Dataset of Meteorological Forcings for Land Surface Modeling. Journal of Climate, 2006, 19, 3088-3111.	3.2	1,581
4	Little change in global drought over the past 60 years. Nature, 2012, 491, 435-438.	27.8	1,532
5	The multi-institution North American Land Data Assimilation System (NLDAS): Utilizing multiple GCIP products and partners in a continental distributed hydrological modeling system. Journal of Geophysical Research, 2004, 109, .	3.3	985
6	Projected changes in drought occurrence under future global warming from multi-model, multi-scenario, IPCC AR4 simulations. Climate Dynamics, 2008, 31, 79-105.	3.8	925
7	Past and future changes in climate and hydrological indicators in the US Northeast. Climate Dynamics, 2007, 28, 381-407.	3.8	697
8	Hyperresolution global land surface modeling: Meeting a grand challenge for monitoring Earth's terrestrial water. Water Resources Research, 2011, 47, .	4.2	634
9	Global assessment of trends in wetting and drying over land. Nature Geoscience, 2014, 7, 716-721.	12.9	613
10	Bias correction of monthly precipitation and temperature fields from Intergovernmental Panel on Climate Change AR4 models using equidistant quantile matching. Journal of Geophysical Research, 2010, 115, .	3.3	581
11	Drought in the Anthropocene. Nature Geoscience, 2016, 9, 89-91.	12.9	537
12	Global Trends and Variability in Soil Moisture and Drought Characteristics, 1950â€“2000, from Observation-Driven Simulations of the Terrestrial Hydrologic Cycle. Journal of Climate, 2008, 21, 432-458.	3.2	536
13	Continentalâ€scale water and energy flux analysis and validation for the North American Land Data Assimilation System project phase 2 (NLDASâ€2): 1. Intercomparison and application of model products. Journal of Geophysical Research, 2012, 117, .	3.3	530
14	Land information system: An interoperable framework for high resolution land surface modeling. Environmental Modelling and Software, 2006, 21, 1402-1415.	4.5	517
15	Anthropogenic warming exacerbates European soil moisture droughts. Nature Climate Change, 2018, 8, 421-426.	18.8	439
16	Soil Moisture Drought in China, 1950â€“2006. Journal of Climate, 2011, 24, 3257-3271.	3.2	392
17	A Drought Monitoring and Forecasting System for Sub-Sahara African Water Resources and Food Security. Bulletin of the American Meteorological Society, 2014, 95, 861-882.	3.3	371
18	Broad threat to humanity from cumulative climate hazards intensified by greenhouse gas emissions. Nature Climate Change, 2018, 8, 1062-1071.	18.8	365

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19	Realâ€time and retrospective forcing in the North American Land Data Assimilation System (NLDAS) project. Journal of Geophysical Research, 2003, 108, .	3.3	357
20	Photosynthetic seasonality of global tropical forests constrained by hydroclimate. Nature Geoscience, 2015, 8, 284-289.	12.9	337
21	Global and Continental Drought in the Second Half of the Twentieth Century: Severityâ€“Areaâ€“Duration Analysis and Temporal Variability of Large-Scale Events. Journal of Climate, 2009, 22, 1962-1981.	3.2	331
22	Evaluation of global observations-based evapotranspiration datasets and IPCC AR4 simulations. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	312
23	Benchmark products for land evapotranspiration: LandFlux-EVAL multi-data set synthesis. Hydrology and Earth System Sciences, 2013, 17, 3707-3720.	4.9	310
24	Global intercomparison of 12 land surface heat flux estimates. Journal of Geophysical Research, 2011, 116, .	3.3	309
25	Characteristics of global and regional drought, 1950â€“2000: Analysis of soil moisture data from offâ€line simulation of the terrestrial hydrologic cycle. Journal of Geophysical Research, 2007, 112, .	3.3	307
26	Drought in a human-modified world: reframing drought definitions, understanding, and analysis approaches. Hydrology and Earth System Sciences, 2016, 20, 3631-3650.	4.9	289
27	A simulated soil moisture based drought analysis for the United States. Journal of Geophysical Research, 2004, 109, .	3.3	281
28	Multifaceted characteristics of dryland aridity changes in a warming world. Nature Reviews Earth & Environment, 2021, 2, 232-250.	29.7	281
29	CMIP5 Climate Model Analyses: Climate Extremes in the United States. Bulletin of the American Meteorological Society, 2014, 95, 571-583.	3.3	270
30	Satellite Remote Sensing for Water Resources Management: Potential for Supporting Sustainable Development in Dataâ€Poor Regions. Water Resources Research, 2018, 54, 9724-9758.	4.2	247
31	North American Climate in CMIP5 Experiments. Part I: Evaluation of Historical Simulations of Continental and Regional Climatology. Journal of Climate, 2013, 26, 9209-9245.	3.2	242
32	Anthropogenic shift towards higher risk of flash drought over China. Nature Communications, 2019, 10, 4661.	12.8	236
33	North American Climate in CMIP5 Experiments: Part III: Assessment of Twenty-First-Century Projections*. Journal of Climate, 2014, 27, 2230-2270.	3.2	231
34	The Observed State of the Water Cycle in the Early Twenty-First Century. Journal of Climate, 2015, 28, 8289-8318.	3.2	230
35	Continentalâ€scale water and energy flux analysis and validation for North American Land Data Assimilation System project phase 2 (NLDASâ€2): 2. Validation of modelâ€simulated streamflow. Journal of Geophysical Research, 2012, 117, .	3.3	229
36	Divergent surface and total soil moisture projections under global warming. Geophysical Research Letters, 2017, 44, 236-244.	4.0	206

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37	Surface radiation budgets in support of the GEWEX Continentalâ€Scale International Project (GCIP) and the GEWEX Americas Prediction Project (GAPP), including the North American Land Data Assimilation System (NLDAS) project. Journal of Geophysical Research, 2003, 108, .	3.3	196
38	The Global Gridded Crop Model Intercomparison: data and modeling protocols for Phase 1 (v1.0). Geoscientific Model Development, 2015, 8, 261-277.	3.6	190
39	Multisource Estimation of Long-Term Terrestrial Water Budget for Major Global River Basins. Journal of Climate, 2012, 25, 3191-3206.	3.2	188
40	Closing the terrestrial water budget from satellite remote sensing. Geophysical Research Letters, 2009, 36, .	4.0	186
41	High-performance Earth system modeling with NASA/GSFCâ€™s Land Information System. Innovations in Systems and Software Engineering, 2007, 3, 157-165.	2.1	184
42	Climate Change and Drought: the Soil Moisture Perspective. Current Climate Change Reports, 2018, 4, 180-191.	8.6	170
43	Detection of Intensification in Global- and Continental-Scale Hydrological Cycles: Temporal Scale of Evaluation. Journal of Climate, 2003, 16, 535-547.	3.2	163
44	Evaluation of multi-model simulated soil moisture in NLDAS-2. Journal of Hydrology, 2014, 512, 107-125.	5.4	163
45	The Observed State of the Energy Budget in the Early Twenty-First Century. Journal of Climate, 2015, 28, 8319-8346.	3.2	160
46	Anthropogenic influence on multidecadal changes in reconstructed global evapotranspiration. Nature Climate Change, 2013, 3, 59-62.	18.8	159
47	Evaluation of the North American Land Data Assimilation System over the southern Great Plains during the warm season. Journal of Geophysical Research, 2003, 108, .	3.3	157
48	Evaluation of 18 satellite- and model-based soil moisture products using in situ measurements from 826 sensors. Hydrology and Earth System Sciences, 2021, 25, 17-40.	4.9	156
49	Reconciling the global terrestrial water budget using satellite remote sensing. Remote Sensing of Environment, 2011, 115, 1850-1865.	11.0	152
50	LS3MIP (v1.0) contribution to CMIP6: the Land Surface, Snow and Soil moisture Model Intercomparison Project â€“ aims, setup and expected outcome. Geoscientific Model Development, 2016, 9, 2809-2832.	3.6	152
51	Spatial downscaling of precipitation using adaptable random forests. Water Resources Research, 2016, 52, 8217-8237.	4.2	152
52	Snow process modeling in the North American Land Data Assimilation System (NLDAS): 2. Evaluation of model simulated snow water equivalent. Journal of Geophysical Research, 2003, 108, .	3.3	150
53	An efficient calibration method for continentalâ€scale land surface modeling. Water Resources Research, 2008, 44, .	4.2	149
54	Multiâ€model, multiâ€sensor estimates of global evapotranspiration: climatology, uncertainties and trends. Hydrological Processes, 2011, 25, 3993-4010.	2.6	147

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55	Climate change alters low flows in Europe under global warming of 1.5, 2, and 3â€Â°C. Hydrology and Earth System Sciences, 2018, 22, 1017-1032.	4.9	146
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.	3.3	142
57	Streamflow and water balance intercomparisons of four land surface models in the North American Land Data Assimilation System project. Journal of Geophysical Research, 2004, 109, .	3.3	141
58	Validation of the North American Land Data Assimilation System (NLDAS) retrospective forcing over the southern Great Plains. Journal of Geophysical Research, 2003, 108, .	3.3	136
59	Evaluation of the Tropical Rainfall Measuring Mission Multi-Satellite Precipitation Analysis (TMPA) for assessment of large-scale meteorological drought. Remote Sensing of Environment, 2015, 159, 181-193.	11.0	126
60	Spatiotemporal dynamics of global drought. Geophysical Research Letters, 2017, 44, 2254-2263.	4.0	125
61	North American Climate in CMIP5 Experiments. Part II: Evaluation of Historical Simulations of Intraseasonal to Decadal Variability. Journal of Climate, 2013, 26, 9247-9290.	3.2	124
62	Terrestrial hydrological controls on land surface phenology of African savannas and woodlands. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1652-1669.	3.0	117
63	Evaluation of historical and future simulations of precipitation and temperature in central Africa from CMIP5 climate models. Journal of Geophysical Research D: Atmospheres, 2016, 121, 130-152.	3.3	116
64	Hydrological consistency using multi-sensor remote sensing data for water and energy cycle studies. Remote Sensing of Environment, 2008, 112, 430-444.	11.0	108
65	Global analysis of seasonal streamflow predictability using an ensemble prediction system and observations from 6192 small catchments worldwide. Water Resources Research, 2013, 49, 2729-2746.	4.2	105
66	Multi-model ensemble projections of European river floods and high flows at 1.5, 2, and 3 degrees global warming. Environmental Research Letters, 2018, 13, 014003.	5.2	104
67	Intensification of hydrological drought in California by human water management. Geophysical Research Letters, 2017, 44, 1777-1785.	4.0	99
68	Shifts in tree functional composition amplify the response of forest biomass to climate. Nature, 2018, 556, 99-102.	27.8	99
69	A Global Drought and Flood Catalogue from 1950 to 2016. Bulletin of the American Meteorological Society, 2020, 101, E508-E535.	3.3	98
70	Land surface model spinâ€up behavior in the North American Land Data Assimilation System (NLDAS). Journal of Geophysical Research, 2003, 108, .	3.3	96
71	Quantifying uncertainty in a remote sensing-based estimate of evapotranspiration over continental USA. International Journal of Remote Sensing, 2010, 31, 3821-3865.	2.9	96
72	Drought. , 0, , .		96

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73	Snow process modeling in the North American Land Data Assimilation System (NLDAS): 1. Evaluation of modelâ€simulated snow cover extent. Journal of Geophysical Research, 2003, 108, .	3.3	95
74	Bias Correction of Global High-Resolution Precipitation Climatologies Using Streamflow Observations from 9372 Catchments. Journal of Climate, 2020, 33, 1299-1315.	3.2	94
75	On the sources of global land surface hydrologic predictability. Hydrology and Earth System Sciences, 2013, 17, 2781-2796.	4.9	93
76	Seasonal Soil Moisture Drought Prediction over Europe Using the North American Multi-Model Ensemble (NMME). Journal of Hydrometeorology, 2015, 16, 2329-2344.	1.9	93
77	A Climate Data Record (CDR) for the global terrestrial water budget: 1984â€“2010. Hydrology and Earth System Sciences, 2018, 22, 241-263.	4.9	91
78	Global Evaluation of the ISBA-TRIP Continental Hydrological System. Part I: Comparison to GRACE Terrestrial Water Storage Estimates and In Situ River Discharges. Journal of Hydrometeorology, 2010, 11, 583-600.	1.9	89
79	An intercomparison of soil moisture fields in the North American Land Data Assimilation System (NLDAS). Journal of Geophysical Research, 2004, 109, .	3.3	88
80	Seasonal Forecasting of Global Hydrologic Extremes: System Development and Evaluation over GEWEX Basins. Bulletin of the American Meteorological Society, 2015, 96, 1895-1912.	3.3	85
81	Impacts of recent drought and warm years on water resources and electricity supply worldwide. Environmental Research Letters, 2016, 11, 124021.	5.2	85
82	Lagged Compound Occurrence of Droughts and Pluvials Globally Over the Past Seven Decades. Geophysical Research Letters, 2020, 47, e2020GL087924.	4.0	84
83	Development of a High-Resolution Gridded Daily Meteorological Dataset over Sub-Saharan Africa: Spatial Analysis of Trends in Climate Extremes. Journal of Climate, 2014, 27, 5815-5835.	3.2	73
84	Deforestation-induced warming over tropical mountain regions regulated by elevation. Nature Geoscience, 2021, 14, 23-29.	12.9	73
85	Probabilistic Seasonal Forecasting of African Drought by Dynamical Models. Journal of Hydrometeorology, 2013, 14, 1706-1720.	1.9	71
86	A physically based approach for the estimation of root-zone soil moisture from surface measurements. Hydrology and Earth System Sciences, 2014, 18, 1199-1212.	4.9	71
87	Application of USDM statistics in NLDAS-2: Optimal blended NLDAS drought index over the continental United States. Journal of Geophysical Research D: Atmospheres, 2014, 119, 2947-2965.	3.3	69
88	Bias Correction of Historical and Future Simulations of Precipitation and Temperature for China from CMIP5 Models. Journal of Hydrometeorology, 2018, 19, 609-623.	1.9	69
89	The impacts of future climate and carbon dioxide changes on the average and variability of US maize yields under two emission scenarios. Environmental Research Letters, 2015, 10, 045003.	5.2	68
90	Test of the SHETRAN technology for modelling the impact of reforestation on badlands runoff and sediment yield at Draix, France. Journal of Hydrology, 2000, 235, 44-62.	5.4	66

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91	Water Balance in the Amazon Basin from a Land Surface Model Ensemble. Journal of Hydrometeorology, 2014, 15, 2586-2614.	1.9	66
92	Assessment of water budget for sixteen large drainage basins in Canada. Journal of Hydrology, 2014, 512, 1-15.	5.4	66
93	Reduced Moisture Transport Linked to Drought Propagation Across North America. Geophysical Research Letters, 2019, 46, 5243-5253.	4.0	64
94	Integrated approaches to understanding and reducing drought impact on food security across scales. Current Opinion in Environmental Sustainability, 2019, 40, 43-54.	6.3	63
95	Contrasting Influences of Human Activities on Hydrological Drought Regimes Over China Based on Highâ€Resolution Simulations. Water Resources Research, 2020, 56, e2019WR025843.	4.2	62
96	Combining hyper-resolution land surface modeling with SMAP brightness temperatures to obtain 30-m soil moisture estimates. Remote Sensing of Environment, 2020, 242, 111740.	11.0	59
97	Less reliable water availability in the 21st century climate projections. Earth's Future, 2014, 2, 152-160.	6.3	59
98	Long-Term Regional Estimates of Evapotranspiration for Mexico Based on Downscaled ISCCP Data. Journal of Hydrometeorology, 2010, 11, 253-275.	1.9	58
99	Global Multimodel Analysis of Drought in Runoff for the Second Half of the Twentieth Century. Journal of Hydrometeorology, 2013, 14, 1535-1552.	1.9	58
100	The Influence of Atlantic Tropical Cyclones on Drought over the Eastern United States (1980â€“2007). Journal of Climate, 2013, 26, 3067-3086.	3.2	58
101	A Prototype Global Drought Information System Based on Multiple Land Surface Models. Journal of Hydrometeorology, 2014, 15, 1661-1676.	1.9	56
102	Hydrological Forecasts and Projections for Improved Decision-Making in the Water Sector in Europe. Bulletin of the American Meteorological Society, 2019, 100, 2451-2472.	3.3	52
103	Correction of the High-Latitude Rain Day Anomaly in the NCEPâ€“NCAR Reanalysis for Land Surface Hydrological Modeling. Journal of Climate, 2004, 17, 3814-3828.	3.2	51
104	Development and Evaluation of a Pan-European Multimodel Seasonal Hydrological Forecasting System. Journal of Hydrometeorology, 2019, 20, 99-115.	1.9	51
105	Validation of Noah-Simulated Soil Temperature in the North American Land Data Assimilation System Phase 2. Journal of Applied Meteorology and Climatology, 2013, 52, 455-471.	1.5	49
106	Soil Moistureâ€“Evapotranspiration Coupling in CMIP5 Models: Relationship with Simulated Climate and Projections. Journal of Climate, 2018, 31, 4865-4878.	3.2	47
107	Changes in drought risk over the contiguous United States (1901â€“2012): The influence of the Pacific and Atlantic Oceans. Geophysical Research Letters, 2014, 41, 5897-5903.	4.0	46
108	Spatial validation of largeâ€scale land surface models against monthly land surface temperature patterns using innovative performance metrics. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5430-5452.	3.3	46

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109	Nonstationarity of low flows and their timing inÂtheÂeasternÂUnitedÂStates. Hydrology and Earth System Sciences, 2016, 20, 633-649.	4.9	44
110	Depiction of drought over subâ€Saharan Africa using reanalyses precipitation data sets. Journal of Geophysical Research D: Atmospheres, 2016, 121, 10,555.	3.3	44
111	Detection Time for Plausible Changes in Annual Precipitation, Evapotranspiration, and Streamflow in Three Mississippi River Sub-Basins. Climatic Change, 2005, 72, 17-36.	3.6	42
112	Representation of Terrestrial Hydrology and Large-Scale Drought of the Continental United States from the North American Regional Reanalysis. Journal of Hydrometeorology, 2012, 13, 856-876.	1.9	42
113	A largeâ€area, spatially continuous assessment of land cover map error and its impact on downstream analyses. Global Change Biology, 2018, 24, 322-337.	9.5	42
114	Estimation of the Terrestrial Water Budget over Northern Eurasia through the Use of Multiple Data Sources. Journal of Climate, 2011, 24, 3272-3293.	3.2	41
115	Climate change and dissolved organic carbon export to the Gulf of Maine. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 2700-2716.	3.0	41
116	Long-term, non-anthropogenic groundwater storage changes simulated by three global-scale hydrological models. Scientific Reports, 2019, 9, 10746.	3.3	40
117	Early season prediction of within-field crop yield variability by assimilating CubeSat data into a crop model. Agricultural and Forest Meteorology, 2022, 313, 108736.	4.8	40
118	Changes in the low flow regime over the eastern United States (1962â€“2011): variability, trends, and attributions. Climatic Change, 2016, 135, 639-653.	3.6	39
119	Solar and wind energy enhances drought resilience and groundwater sustainability. Nature Communications, 2019, 10, 4893.	12.8	39
120	Determinants of the ratio of actual to potential evapotranspiration. Global Change Biology, 2019, 25, 1326-1343.	9.5	39
121	Projected Seasonal Changes in Large-Scale Global Precipitation and Temperature Extremes Based on the CMIP5 Ensemble. Journal of Climate, 2020, 33, 5651-5671.	3.2	39
122	Evapotranspiration simulations in ISIMIP2aâ€”Evaluation of spatio-temporal characteristics with a comprehensive ensemble of independent datasets. Environmental Research Letters, 2018, 13, 075001.	5.2	38
123	Evapotranspiration Partitioning in CMIP5 Models: Uncertainties and Future Projections. Journal of Climate, 2019, 32, 2653-2671.	3.2	38
124	Uncertainties, Correlations, and Optimal Blends of Drought Indices from the NLDAS Multiple Land Surface Model Ensemble. Journal of Hydrometeorology, 2014, 15, 1636-1650.	1.9	37
125	Continental Runoff into the Oceans (1950â€“2008). Journal of Hydrometeorology, 2015, 16, 1502-1520.	1.9	37
126	Connectivity between Eurasian snow cover extent and Canadian snow water equivalent and river discharge. Journal of Geophysical Research, 2005, 110, .	3.3	36

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127	A global near-real-time soil moisture index monitor for food security using integrated SMOS and SMAP. Remote Sensing of Environment, 2020, 246, 111864.	11.0	35
128	A multiscale analysis of drought and pluvial mechanisms for the Southeastern United States. Journal of Geophysical Research D: Atmospheres, 2014, 119, 7348-7367.	3.3	34
129	Uncertainties in Future Projections of Summer Droughts and Heat Waves over the Contiguous United States. Journal of Climate, 2017, 30, 6225-6246.	3.2	34
130	Farmer forecasts: Impacts of seasonal rainfall expectations on agricultural decision-making in Sub-Saharan Africa. Climate Risk Management, 2020, 30, 100247.	3.2	34
131	Reconciling agriculture, carbon and biodiversity in a savannah transformation frontier. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150316.	4.0	33
132	The PROFOUND Database for evaluating vegetation models and simulating climate impacts on European forests. Earth System Science Data, 2020, 12, 1295-1320.	9.9	33
133	Did a skillful prediction of sea surface temperatures help or hinder forecasting of the 2012 Midwestern US drought?. Environmental Research Letters, 2014, 9, 034005.	5.2	30
134	Assimilation of soil moisture and canopy cover data improves maize simulation using an under-calibrated crop model. Agricultural Water Management, 2021, 252, 106884.	5.6	30
135	Cognitive Biases about Climate Variability in Smallholder Farming Systems in Zambia. Weather, Climate, and Society, 2019, 11, 369-383.	1.1	29
136	Reply to comment by Keith J. Beven and Hannah L. Cloke on â€œHyperresolution global land surface modeling: Meeting a grand challenge for monitoring Earth's terrestrial waterâ€• Water Resources Research, 2012, 48, .	4.2	26
137	Validation of AIRS/AMSUâ€A water vapor and temperature data with in situ aircraft observations from the surface to UT/LS from 87Â°Nâ€“67Â°S. Journal of Geophysical Research D: Atmospheres, 2013, 118, 6816-6836.	3.3	25
138	Multimodel Analysis of Energy and Water Fluxes: Intercomparisons between Operational Analyses, a Land Surface Model, and Remote Sensing. Journal of Hydrometeorology, 2012, 13, 3-26.	1.9	24
139	SMAP-HydroBlocks, a 30-m satellite-based soil moisture dataset for the conterminous US. Scientific Data, 2021, 8, 264.	5.3	24
140	Terrestrial Precipitation Analysis (<scp>TPA</scp>): A resource for characterizing longâ€term precipitation regimes and extremes. Methods in Ecology and Evolution, 2016, 7, 1396-1401.	5.2	23
141	Field-scale soil moisture bridges the spatial-scale gap between drought monitoring and agricultural yields. Hydrology and Earth System Sciences, 2021, 25, 1827-1847.	4.9	23
142	Using a Gridded Global Dataset to Characterize Regional Hydroclimate in Central Chile. Journal of Hydrometeorology, 2013, 14, 251-265.	1.9	21
143	The role of winter precipitation and temperature on northern Eurasian streamflow trends. Journal of Geophysical Research, 2012, 117, .	3.3	20
144	Response of electricity sector air pollution emissions to drought conditions in the western United States. Environmental Research Letters, 2018, 13, 124032.	5.2	20

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145	Drivers of Variability in Atmospheric Evaporative Demand: Multiscale Spectral Analysis Based on Observations and Physically Based Modeling. Water Resources Research, 2018, 54, 3510-3529.	4.2	20
146	Satellite Flood Inundation Assessment and Forecast Using SMAP and Landsat. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 6707-6715.	4.9	20
147	Increased Drought and Pluvial Risk over California due to Changing Oceanic Conditions. Journal of Climate, 2016, 29, 8269-8279.	3.2	19
148	Historical effects of CO2 and climate trends on global crop water demand. Nature Climate Change, 2017, 7, 901-905.	18.8	19
149	The Optimal Multimodel Ensemble of Bias-Corrected CMIP5 Climate Models over China. Journal of Hydrometeorology, 2020, 21, 845-863.	1.9	19
150	Confronting terrestrial biosphere models with forest inventory data. , 2014, 24, 699-715.		18
151	Crop-specific exposure to extreme temperature and moisture for the globe for the last half century. Environmental Research Letters, 2021, 16, 064006.	5.2	18
152	Comparing empirical and survey-based yield forecasts in a dryland agro-ecosystem. Agricultural and Forest Meteorology, 2018, 262, 147-156.	4.8	17
153	Streamflow prediction in â€œgeopolitically ungaugedâ€•basins using satellite observations and regionalization at subcontinental scale. Journal of Hydrology, 2020, 588, 125016.	5.4	16
154	Global sensitivity analysis of crop yield and transpiration from the FAO-AquaCrop model for dryland environments. Field Crops Research, 2021, 269, 108182.	5.1	16
155	Changing water availability during the African maize-growing season, 1979â€“2010. Environmental Research Letters, 2014, 9, 075005.	5.2	15
156	Twentieth century temperature trends in CMIP3, CMIP5, and CESMâ€ŁE climate simulations: Spatialâ€temporal uncertainties, differences, and their potential sources. Journal of Geophysical Research D: Atmospheres, 2016, 121, 9561-9575.	3.3	15
157	Historic and Projected Changes in Coupling Between Soil Moisture and Evapotranspiration (ET) in CMIP5 Models Confounded by the Role of Different ET Components. Journal of Geophysical Research D: Atmospheres, 2019, 124, 5791-5806.	3.3	15
158	A stochastic space-time rainfall forecasting system for real time flow forecasting I: Development of MTB conditional rainfall scenario generator. Hydrology and Earth System Sciences, 2000, 4, 603-615.	4.9	14
159	Recent changes in cropland area and productivity indicate unsustainable cropland expansion in Malawi. Environmental Research Letters, 2021, 16, 084052.	5.2	14
160	Decision support system for desertification mitigation in the Agri basin, southern Italy. Physics and Chemistry of the Earth, 2003, 28, 579-587.	2.9	13
161	Climate-driven shifts in continental net primary production implicated as a driver of a recent abrupt increase in the land carbon sink. Biogeosciences, 2016, 13, 1597-1607.	3.3	12
162	Increased flooded area and exposure in the White Volta river basin in Western Africa, identified from multi-source remote sensing data. Scientific Reports, 2022, 12, 3701.	3.3	12

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163	Comparison of hydrological and vegetation remote sensing datasets as proxies for rainfed maize yield in Malawi. Agricultural Water Management, 2022, 262, 107375.	5.6	11
164	A stochastic space-time rainfall forecasting system for real time flow forecasting II: Application of SHETRAN and ARNO rainfall runoff models to the Brue catchment. Hydrology and Earth System Sciences, 2000, 4, 617-626.	4.9	10
165	Multi-variable assimilation into a modified AquaCrop model for improved maize simulation without management or crop phenology information. Agricultural Water Management, 2022, 266, 107576.	5.6	10
166	Overview of the North American Land Data Assimilation System (NLDAS). , 2013, , 337-377.		9
167	Identification of uncertainty sources in quasi-global discharge and inundation simulations using satellite-based precipitation products. Journal of Hydrology, 2020, 589, 125180.	5.4	9
168	Maize Yield Estimation in Intercropped Smallholder Fields Using Satellite Data in Southern Malawi. Remote Sensing, 2022, 14, 2458.	4.0	8
169	Simulating the effect of vegetation cover on the sediment yield of mediterranean catchments using SHETRAN. Physics and Chemistry of the Earth, 1995, 20, 427-432.	0.3	7
170	Towards Global Drought Early Warning Capability: Expanding international cooperation for the development of a framework for global drought monitoring and forecasting. Bulletin of the American Meteorological Society, 0, , 130121120822004.	3.3	7
171	Continuous and consistent land use/cover change estimates using socio-ecological data. Earth System Dynamics, 2017, 8, 55-73.	7.1	6
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173	Variability and changes in hydrological drought in the Volta Basin, West Africa. Journal of Hydrology: Regional Studies, 2022, 42, 101143.	2.4	6
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