Randal D Koster

List of Publications by Year
in descending order

180 papers	33,429 citations	7551 77 h-index	4101 175 g-index
186 all docs	186 docs citations	186 times ranked	20700 citing authors

#	Article	IF	Citations
1	The Modern-Era Retrospective Analysis for Research and Applications, Version 2 (MERRA-2). Journal of Climate, 2017, 30, 5419-5454.	1.2	4,520
2	MERRA: NASAâ€™s Modern-Era Retrospective Analysis for Research and Applications. Journal of Climate, 2011, 24, 3624-3648.	1.2	4,118
3	The Soil Moisture Active Passive (SMAP) Mission. Proceedings of the IEEE, 2010, 98, 704-716.	16.4	2,546
4	Regions of Strong Coupling Between Soil Moisture and Precipitation. Science, 2004, 305, 1138-1140.	6.0	2,337
5	A catchment-based approach to modeling land surface processes in a general circulation model: 1. Model structure. Journal of Geophysical Research, 2000, 105, 24809-24822.	3.3	673
6	GLACE: The Global Landâ€“Atmosphere Coupling Experiment. Part I: Overview. Journal of Hydrometeorology, 2006, 7, 590-610.	0.7	616
7	Validity of the temperature reconstruction from water isotopes in ice cores. Journal of Geophysical Research, 1997, 102, 26471-26487.	3.3	524
8	On the Cause of the 1930s Dust Bowl. Science, 2004, 303, 1855-1859.	6.0	494
9	On the Nature of Soil Moisture in Land Surface Models. Journal of Climate, 2009, 22, 4322-4335.	1.2	490
10	Bias reduction in short records of satellite soil moisture. Geophysical Research Letters, 2004, 31, .	1.5	482
11	Modeling the land surface boundary in climate models as a composite of independent vegetation stands. Journal of Geophysical Research, 1992, 97, 2697-2715.	3.3	451
12	Assessment and Enhancement of MERRA Land Surface Hydrology Estimates. Journal of Climate, 2011, 24, 6322-6338.	1.2	409
13	Soil Moisture Memory in Climate Models. Journal of Hydrometeorology, 2001, 2, 558-570.	0.7	397
14	Performance Metrics for Soil Moisture Retrievals and Application Requirements. Journal of Hydrometeorology, 2010, 11, 832-840.	0.7	391
15	Variance and Predictability of Precipitation at Seasonal-to-Interannual Timescales. Journal of Hydrometeorology, 2000, 1, 26-46.	0.7	389
16	GLACE: The Global Landâ€“Atmosphere Coupling Experiment. Part II: Analysis. Journal of Hydrometeorology, 2006, 7, 611-625.	0.7	337
17	Contribution of land surface initialization to subseasonal forecast skill: First results from a multiâ€model experiment. Geophysical Research Letters, 2010, 37, .	1.5	330
18	Extended versus Ensemble Kalman Filtering for Land Data Assimilation. Journal of Hydrometeorology, 2002, 3, 728-740.	0.7	317

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19	Global Soil Moisture from Satellite Observations, Land Surface Models, and Ground Data: Implications for Data Assimilation. Journal of Hydrometeorology, 2004, 5, 430-442.	0.7	315
20	Causes of Long-Term Drought in the U.S. Great Plains. Journal of Climate, 2004, 17, 485-503.	1.2	307
21	Simulations of the HDO and H₂¹⁸O atmospheric cycles using the NASA GISS general circulation model: The seasonal cycle for presentâ€day conditions. Journal of Geophysical Research, 1987, 92, 14739-14760.	3.3	303
22	Comparison and assimilation of global soil moisture retrievals from the Advanced Microwave Scanning Radiometer for the Earth Observing System (AMSR-E) and the Scanning Multichannel Microwave Radiometer (SMMR). Journal of Geophysical Research, 2007, 112, .	3.3	301
23	The Interplay between Transpiration and Runoff Formulations in Land Surface Schemes Used with Atmospheric Models. Journal of Climate, 1997, 10, 1578-1591.	1.2	297
24	Cabauw Experimental Results from the Project for Intercomparison of Land-Surface Parameterization Schemes. Journal of Climate, 1997, 10, 1194-1215.	1.2	296
25	The Second Phase of the Global Landâ€“Atmosphere Coupling Experiment: Soil Moisture Contributions to Subseasonal Forecast Skill. Journal of Hydrometeorology, 2011, 12, 805-822.	0.7	296
26	A U.S. CLIVAR Project to Assess and Compare the Responses of Global Climate Models to Drought-Related SST Forcing Patterns: Overview and Results. Journal of Climate, 2009, 22, 5251-5272.	1.2	282
27	Land Surface Precipitation in MERRA-2. Journal of Climate, 2017, 30, 1643-1664.	1.2	271
28	The Project for Intercomparison of Land-surface Parameterization Schemes (PILPS) Phase 2(c) Redâ€“Arkansas River basin experiment:. Global and Planetary Change, 1998, 19, 115-135.	1.6	265
29	Soil Moisture Memory in AGCM Simulations: Analysis of Global Landâ€“Atmosphere Coupling Experiment (GLACE) Data. Journal of Hydrometeorology, 2006, 7, 1090-1112.	0.7	257
30	A Simple Framework for Examining the Interannual Variability of Land Surface Moisture Fluxes. Journal of Climate, 1999, 12, 1911-1917.	1.2	248
31	Assessment of MERRA-2 Land Surface Hydrology Estimates. Journal of Climate, 2017, 30, 2937-2960.	1.2	243
32	Skill in streamflow forecasts derived from large-scale estimates of soil moisture and snow. Nature Geoscience, 2010, 3, 613-616.	5.4	231
33	A catchment-based approach to modeling land surface processes in a general circulation model: 2. Parameter estimation and model demonstration. Journal of Geophysical Research, 2000, 105, 24823-24838.	3.3	226
34	The hydrosphere State (hydros) Satellite mission: an Earth system pathfinder for global mapping of soil moisture and land freeze/thaw. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 2184-2195.	2.7	217
35	Observational evidence that soil moisture variations affect precipitation. Geophysical Research Letters, 2003, 30, n/a-n/a.	1.5	216
36	Glacial-Interglacial Changes in Moisture Sources for Greenland: Influences on the Ice Core Record of Climate. Science, 1994, 263, 508-511.	6.0	215

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37	Global assimilation of satellite surface soil moisture retrievals into the NASA Catchment land surface model. Geophysical Research Letters, 2005, 32, .	1.5	202
38	Do Global Models Properly Represent the Feedback between Land and Atmosphere?. Journal of Hydrometeorology, 2006, 7, 1177-1198.	0.7	200
39	Water isotopes in precipitation:. Quaternary Science Reviews, 2000, 19, 363-379.	1.4	196
40	Assessment of the SMAP Level-4 Surface and Root-Zone Soil Moisture Product Using In Situ Measurements. Journal of Hydrometeorology, 2017, 18, 2621-2645.	0.7	196
41	An Agenda for Land Surface Hydrology Research and a Call for the Second International Hydrological Decade. Bulletin of the American Meteorological Society, 1999, 80, 2043-2058.	1.7	188
42	The 2010 Russian drought impact on satellite measurements of solar-induced chlorophyll fluorescence: Insights from modeling and comparisons with parameters derived from satellite reflectances. Remote Sensing of Environment, 2015, 166, 163-177.	4.6	186
43	A land surface data assimilation framework using the land information system: Description and applications. Advances in Water Resources, 2008, 31, 1419-1432.	1.7	182
44	The RhÃ´ne-Aggregation Land Surface Scheme Intercomparison Project: An Overview. Journal of Climate, 2004, 17, 187-208.	1.2	178
45	Realistic Initialization of Land Surface States: Impacts on Subseasonal Forecast Skill. Journal of Hydrometeorology, 2004, 5, 1049-1063.	0.7	178
46	Role of Subsurface Physics in the Assimilation of Surface Soil Moisture Observations. Journal of Hydrometeorology, 2009, 10, 1534-1547.	0.7	178
47	Northern Eurasian Heat Waves and Droughts. Journal of Climate, 2014, 27, 3169-3207.	1.2	178
48	Global sources of local precipitation as determined by the Nasa/Giss GCM. Geophysical Research Letters, 1986, 13, 121-124.	1.5	177
49	Global Meteorological Drought: A Synthesis of Current Understanding with a Focus on SST Drivers of Precipitation Deficits. Journal of Climate, 2016, 29, 3989-4019.	1.2	161
50	Analyzing the Concurrence of Meteorological Droughts and Warm Periods, with Implications for the Determination of Evaporative Regime. Journal of Climate, 2009, 22, 3331-3341.	1.2	156
51	The Project for Intercomparison of Land-surface Parameterization Schemes (PILPS) phase 2(c) Redâ€“Arkansas River basin experiment:. Global and Planetary Change, 1998, 19, 161-179.	1.6	154
52	Assimilation of GRACE terrestrial water storage into a land surface model: Evaluation and potential value for drought monitoring in western and central Europe. Journal of Hydrology, 2012, 446-447, 103-115.	2.3	154
53	Multimodel Ensemble Reconstruction of Drought over the Continental United States. Journal of Climate, 2009, 22, 2694-2712.	1.2	153
54	The Subseasonal Experiment (SubX): A Multimodel Subseasonal Prediction Experiment. Bulletin of the American Meteorological Society, 2019, 100, 2043-2060.	1.7	153

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55	A Comparative Analysis of Two Land Surface Heterogeneity Representations. Journal of Climate, 1992, 5, 1379-1390.	1.2	151
56	Stable water isotope behavior during the last glacial maximum: A general circulation model analysis. Journal of Geophysical Research, 1994, 99, 25791.	3.3	150
57	Snow Cover and Snow Mass Intercomparisons of General Circulation Models and Remotely Sensed Datasets. Journal of Climate, 1996, 9, 409-426.	1.2	143
58	Evaluating the utility of satellite soil moisture retrievals over irrigated areas and the ability of land data assimilation methods to correct for unmodeled processes. Hydrology and Earth System Sciences, 2015, 19, 4463-4478.	1.9	134
59	Assimilation of Satellite-Derived Skin Temperature Observations into Land Surface Models. Journal of Hydrometeorology, 2010, 11, 1103-1122.	0.7	128
60	Relative contributions of land and ocean processes to precipitation variability. Journal of Geophysical Research, 1995, 100, 13775.	3.3	121
61	The Sensitivity of Surface Fluxes to Soil Water Content in Three Land Surface Schemes. Journal of Hydrometeorology, 2000, 1, 121-134.	0.7	121
62	Assessing the Impact of Horizontal Error Correlations in Background Fields on Soil Moisture Estimation. Journal of Hydrometeorology, 2003, 4, 1229-1242.	0.7	121
63	The Impact of Detailed Snow Physics on the Simulation of Snow Cover and Subsurface Thermodynamics at Continental Scales. Journal of Hydrometeorology, 2001, 2, 228-242.	0.7	118
64	Comparing the Degree of Landâ€“Atmosphere Interaction in Four Atmospheric General Circulation Models. Journal of Hydrometeorology, 2002, 3, 363-375.	0.7	118
65	Impact of Land Surface Initialization on Seasonal Precipitation and Temperature Prediction. Journal of Hydrometeorology, 2003, 4, 408-423.	0.7	118
66	Soil Moisture, Snow, and Seasonal Streamflow Forecasts in the United States. Journal of Hydrometeorology, 2012, 13, 189-203.	0.7	113
67	Soil moisture effects on seasonal temperature and precipitation forecast scores in Europe. Climate Dynamics, 2012, 38, 349-362.	1.7	108
68	Version 4 of the SMAP Levelâ€4 Soil Moisture Algorithm and Data Product. Journal of Advances in Modeling Earth Systems, 2019, 11, 3106-3130.	1.3	104
69	Key results and implications from phase 1(c) of the Project for Intercomparison of Land-surface Parametrization Schemes. Climate Dynamics, 1999, 15, 673-684.	1.7	103
70	An updated treatment of soil texture and associated hydraulic properties in a global land modeling system. Journal of Advances in Modeling Earth Systems, 2014, 6, 957-979.	1.3	103
71	Global Assessment of the SMAP Level-4 Surface and Root-Zone Soil Moisture Product Using Assimilation Diagnostics. Journal of Hydrometeorology, 2017, 18, 3217-3237.	0.7	101
72	The ISLSCP Initiative I Global Datasets: Surface Boundary Conditions and Atmospheric Forcings for Land-Atmosphere Studies. Bulletin of the American Meteorological Society, 1996, 77, 1987-2005.	1.7	99

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73	The components of a â€˜SVATâ€™ scheme and their effects on a GCM's hydrological cycle. Advances in Water Resources, 1994, 17, 61-78.	1.7	96
74	Impacts of Local Soil Moisture Anomalies on the Atmospheric Circulation and on Remote Surface Meteorological Fields during Boreal Summer: A Comprehensive Analysis over North America. Journal of Climate, 2016, 29, 7345-7364.	1.2	93
75	Confronting Weather and Climate Models with Observational Data from Soil Moisture Networks over the United States. Journal of Hydrometeorology, 2016, 17, 1049-1067.	0.7	83
76	The Project for Intercomparison of Land-surface Parameterization Schemes (PILPS) phase 2(c) Red-Arkansas River basin experiment:. Global and Planetary Change, 1998, 19, 137-159.	1.6	82
77	Simulations of the HDO and H₂¹⁸O atmospheric cycles using the NASA GISS general circulation model: Sensitivity experiments for presentâ€day conditions. Journal of Geophysical Research, 1991, 96, 7495-7507.	3.3	79
78	Contribution of soil moisture retrievals to land data assimilation products. Geophysical Research Letters, 2008, 35, .	1.5	79
79	Precipitation estimation using <scp>L</scp>â€band and <scp>C</scp>â€band soil moisture retrievals. Water Resources Research, 2016, 52, 7213-7225.	1.7	76
80	A reconsideration of the initial conditions used for stable water isotope models. Journal of Geophysical Research, 1996, 101, 22933-22938.	3.3	74
81	Global relationships among traditional reflectance vegetation indices (NDVI and NDII), evapotranspiration (ET), and soil moisture variability on weekly timescales. Remote Sensing of Environment, 2018, 219, 339-352.	4.6	74
82	Assessment of MERRA-2 Land Surface Energy Flux Estimates. Journal of Climate, 2018, 31, 671-691.	1.2	71
83	Potential Predictability of Long-Term Drought and Pluvial Conditions in the U.S. Great Plains. Journal of Climate, 2008, 21, 802-816.	1.2	70
84	Flash Drought as Captured by Reanalysis Data: Disentangling the Contributions of Precipitation Deficit and Excess Evapotranspiration. Journal of Hydrometeorology, 2019, 20, 1241-1258.	0.7	70
85	Land Surface Controls on Hydroclimatic Means and Variability. Journal of Hydrometeorology, 2012, 13, 1604-1620.	0.7	69
86	Verification of Landâ€“Atmosphere Coupling in Forecast Models, Reanalyses, and Land Surface Models Using Flux Site Observations. Journal of Hydrometeorology, 2018, 19, 375-392.	0.7	66
87	On the Role of SST Forcing in the 2011 and 2012 Extreme U.S. Heat and Drought: A Study in Contrasts. Journal of Hydrometeorology, 2014, 15, 1255-1273.	0.7	65
88	Impact of snow darkening via dust, black carbon, and organic carbon on boreal spring climate in the Earth system. Journal of Geophysical Research D: Atmospheres, 2015, 120, 5485-5503.	1.2	64
89	Sources of Sahel Precipitation for Simulated Drought and Rainy Seasons. Journal of Climate, 1989, 2, 1438-1446.	1.2	63
90	Origin of July Antarctic precipitation and its influence on deuterium content: a GCM analysis. Climate Dynamics, 1992, 7, 195-203.	1.7	62

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91	Continental water recycling and H₂¹⁸O concentrations. Geophysical Research Letters, 1993, 20, 2215-2218.	1.5	62
92	The Influence of Land Surface Moisture Retention on Precipitation Statistics. Journal of Climate, 1996, 9, 2551-2567.	1.2	62
93	Influence of the Interannual Variability of Vegetation on the Surface Energy Balanceâ€"A Global Sensitivity Study. Journal of Hydrometeorology, 2002, 3, 617-629.	0.7	59
94	Deuterium excess in Greenland snow: Analysis with simple and complex models. Journal of Geophysical Research, 1998, 103, 8947-8953.	3.3	56
95	Relevance of time-varying and time-invariant retrieval error sources on the utility of spaceborne soil moisture products. Geophysical Research Letters, 2005, 32, .	1.5	55
96	The origin of Antarctic precipitation: a modelling approach. Tellus, Series B: Chemical and Physical Meteorology, 2022, 52, 19.	0.8	54
97	Large-Scale Influences on Summertime Extreme Precipitation in the Northeastern United States. Journal of Hydrometeorology, 2016, 17, 3045-3061.	0.7	54
98	Influence of dust and black carbon on the snow albedo in the NASA Goddard Earth Observing System version 5 land surface model. Journal of Geophysical Research, 2011, 116, .	3.3	52
99	GEOSâ€S2S Version 2: The GMAO Highâ€Resolution Coupled Model and Assimilation System for Seasonal Prediction. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031767.	1.2	52
100	The origin of Antarctic precipitation: a modelling approach. Tellus, Series B: Chemical and Physical Meteorology, 2000, 52, 19-36.	0.8	50
101	Rebound in Atmospheric Predictability and the Role of the Land Surface. Journal of Climate, 2012, 25, 4744-4749.	1.2	50
102	Impact of soil moisture initialization on boreal summer subseasonal forecasts: mid-latitude surface air temperature and heat wave events. Climate Dynamics, 2019, 52, 1695-1709.	1.7	47
103	African Easterly Jet: Structure and Maintenance. Journal of Climate, 2009, 22, 4459-4480.	1.2	46
104	A Mechanism for Landâ€"Atmosphere Feedback Involving Planetary Wave Structures. Journal of Climate, 2014, 27, 9290-9301.	1.2	46
105	Validity of the isotopic thermometer in central Antarctica: Limited impact of glacial precipitation seasonality and moisture origin. Geophysical Research Letters, 2000, 27, 2677-2680.	1.5	45
106	Phenological versus meteorological controls on landâ€atmosphere water and carbon fluxes. Journal of Geophysical Research G: Biogeosciences, 2013, 118, 14-29.	1.3	45
107	The Physical Mechanisms by Which the Leading Patterns of SST Variability Impact U.S. Precipitation. Journal of Climate, 2010, 23, 1815-1836.	1.2	43
108	A Revised Framework for Analyzing Soil Moisture Memory in Climate Data: Derivation and Interpretation. Journal of Hydrometeorology, 2012, 13, 404-412.	0.7	43

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109	The role of soil moisture initialization in subseasonal and seasonal streamflow prediction â€“ A case study in Sri Lanka. Advances in Water Resources, 2008, 31, 1333-1343.	1.7	42
110	PEATâ€CLSM: A Specific Treatment of Peatland Hydrology in the NASA Catchment Land Surface Model. Journal of Advances in Modeling Earth Systems, 2019, 11, 2130-2162.	1.3	40
111	Timescales of Land Surface Evapotranspiration Response. Journal of Climate, 1997, 10, 559-566.	1.2	38
112	Sensitivity of Latent Heat Flux from PILPS Land-Surface Schemes to Perturbations of Surface Air Temperature. Journals of the Atmospheric Sciences, 1998, 55, 1909-1927.	0.6	38
113	Improved Hydrological Simulation Using SMAP Data: Relative Impacts of Model Calibration and Data Assimilation. Journal of Hydrometeorology, 2018, 19, 727-741.	0.7	38
114	Estimating Basinâ€Scale Water Budgets With SMAP Soil Moisture Data. Water Resources Research, 2018, 54, 4228-4244.	1.7	37
115	Inferring Soil Moisture Memory from Streamflow Observations Using a Simple Water Balance Model. Journal of Hydrometeorology, 2013, 14, 1773-1790.	0.7	36
116	MEETING SUMMARIES. Bulletin of the American Meteorological Society, 2007, 88, 1625-1634.	1.7	32
117	The NASA Hydrological Forecast System for Food and Water Security Applications. Bulletin of the American Meteorological Society, 2020, 101, E1007-E1025.	1.7	31
118	The global geochemistry of bombâ€produced tritium: General circulation model compared to available observations and traditional interpretations. Journal of Geophysical Research, 1989, 94, 18305-18326.	3.3	30
119	Suggestions in the Observational Record of Landâ€“Atmosphere Feedback Operating at Seasonal Time Scales. Journal of Hydrometeorology, 2004, 5, 567-572.	0.7	30
120	A One-Dimensional Interactive Soil-Atmosphere Model for Testing Formulations of Surface Hydrology. Journal of Climate, 1990, 3, 593-606.	1.2	28
121	Representation of subsurface storm flow and a more responsive water table in a TOPMODEL-based hydrology model. Water Resources Research, 2002, 38, 31-1-31-16.	1.7	28
122	Impact of Subsurface Temperature Variability on Surface Air Temperature Variability: An AGCM Study. Journal of Hydrometeorology, 2008, 9, 804-815.	0.7	28
123	Hydroclimatic variability and predictability: a survey of recent research. Hydrology and Earth System Sciences, 2017, 21, 3777-3798.	1.9	28
124	Effect of a Canopy Interception Reservoir on Hydrological Persistence in a General Circulation Model. Journal of Climate, 1995, 8, 1917-1922.	1.2	27
125	Seasonal Precipitation Timing and Ice Core Records. Science, 1995, 269, 247-248.	6.0	27
126	Revisiting a hydrological analysis framework with International Satellite Land Surface Climatology Project Initiative 2 rainfall, net radiation, and runoff fields. Journal of Geophysical Research, 2006, 111, .	3.3	27

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127	SMAP Level 4 Surface and Root Zone Soil Moisture. , 2016, , .		25
128	Intercomparison of Soil Moisture Memory in Two Land Surface Models. Journal of Hydrometeorology, 2003, 4, 1134-1146.	0.7	24
129	A Data-Driven Approach for Daily Real-Time Estimates and Forecasts of Near-Surface Soil Moisture. Journal of Hydrometeorology, 2017, 18, 837-843.	0.7	24
130	Impacts of Snow Darkening by Deposition of Lightâ€Absorbing Aerosols on Hydroclimate of Eurasia During Boreal Spring and Summer. Journal of Geophysical Research D: Atmospheres, 2018, 123, 8441-8461.	1.2	23
131	Prediction Skill of the 2012 U.S. Great Plains Flash Drought in Subseasonal Experiment (SubX) Models. Journal of Climate, 2020, 33, 6229-6253.	1.2	23
132	Distinct Hydrological Signatures in Observed Historical Temperature Fields. Journal of Hydrometeorology, 2006, 7, 1061-1075.	0.7	22
133	AGCM Biases in Evaporation Regime: Impacts on Soil Moisture Memory and Landâ€“Atmosphere Feedback. Journal of Hydrometeorology, 2005, 6, 656-669.	0.7	21
134	Estimation of Predictability with a Newly Derived Index to Quantify Similarity among Ensemble Members. Monthly Weather Review, 2007, 135, 2674-2687.	0.5	21
135	Permafrost variability over the Northern Hemisphere based on the MERRA-2 reanalysis. Cryosphere, 2019, 13, 2087-2110.	1.5	21
136	Mechanisms Associated with Daytime and Nighttime Heat Waves over the Contiguous United States. Journal of Applied Meteorology and Climatology, 2020, 59, 1865-1882.	0.6	21
137	Simulation of high-latitude hydrological processes in the Torneâ€“Kalix basin: PILPS Phase 2(e). Global and Planetary Change, 2003, 38, 55-71.	1.6	20
138	The Contributions of Gauge-Based Precipitation and SMAP Brightness Temperature Observations to the Skill of the SMAP Level-4 Soil Moisture Product. Journal of Hydrometeorology, 2021, 22, 405-424.	0.7	20
139	Hydroclimatic Controls on the Means and Variability of Vegetation Phenology and Carbon Uptake. Journal of Climate, 2014, 27, 5632-5652.	1.2	19
140	â€œEfficiency Spaceâ€• A Framework for Evaluating Joint Evaporation and Runoff Behavior*. Bulletin of the American Meteorological Society, 2015, 96, 393-396.	1.7	19
141	The Offline Validation of Land Surface Models. Journal of the Meteorological Society of Japan, 1999, 77, 257-263.	0.7	18
142	Interactive Vegetation Phenology, Soil Moisture, and Monthly Temperature Forecasts. Journal of Hydrometeorology, 2015, 16, 1456-1465.	0.7	17
143	Recent Advances in Land Data Assimilation at the NASA Global Modeling and Assimilation Office. , 2009, , 407-428.		17
144	Improving early warning of drought-driven food insecurity in southern Africa using operational hydrological monitoring and forecasting products. Natural Hazards and Earth System Sciences, 2020, 20, 1187-1201.	1.5	17

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145	Drought-Induced Warming in the Continental United States under Different SST Regimes. Journal of Climate, 2009, 22, 5385-5400.	1.2	16
146	Tendency Bias Correction in Coupled and Uncoupled Global Climate Models with a Focus on Impacts over North America. Journal of Climate, 2019, 32, 639-661.	1.2	16
147	On the Development and Demise of the Fall 2019 Southeast U.S. Flash Drought: Links to an Extreme Positive IOD. Journal of Climate, 2021, 34, 1701-1723.	1.2	16
148	Investigation of the 2016 Eurasia heat wave as an event of the recent warming. Environmental Research Letters, 2020, 15, 114018.	2.2	16
149	A catchment-based land surface model for GCMS and the framework for its evaluation. Physics and Chemistry of the Earth, 1999, 24, 769-773.	0.3	15
150	Seasonal variation of landâ€“atmosphere coupling strength over the West African monsoon region in an atmospheric general circulation model. Hydrological Sciences Journal, 2013, 58, 1276-1286.	1.2	15
151	Soil Moisture Initialization Error and Subgrid Variability of Precipitation in Seasonal Streamflow Forecasting. Journal of Hydrometeorology, 2014, 15, 69-88.	0.7	15
152	Phase Locking of the Boreal Summer Atmospheric Response to Dry Land Surface Anomalies in the Northern Hemisphere. Journal of Climate, 2019, 32, 1081-1099.	1.2	15
153	The pattern across the continental United States of evapotranspiration variability associated with water availability. Frontiers in Earth Science, 2015, 3, .	0.8	12
154	Influence of Land Surface Fluxes on Precipitation: Inferences from Simulations Forced with Four ARMâ€“CART SCM Datasets. Journal of Climate, 2001, 14, 3666-3691.	1.2	11
155	Attribution of the 2017 Northern High Plains Drought. Bulletin of the American Meteorological Society, 2019, 100, S25-S29.	1.7	10
156	The impact of spatiotemporal variability in atmospheric CO₂ concentration on global terrestrial carbon fluxes. Biogeosciences, 2018, 15, 5635-5652.	1.3	9
157	Using a Simple Water Balance Framework to Quantify the Impact of Soil Moisture Initialization on Subseasonal Evapotranspiration and Air Temperature Forecasts. Journal of Hydrometeorology, 2020, 21, 1705-1722.	0.7	9
158	Tropical Peatland Hydrology Simulated With a Global Land Surface Model. Journal of Advances in Modeling Earth Systems, 2022, 14, .	1.3	9
159	Evaluation and Enhancement of Permafrost Modeling With the <scp>NASA</scp> Catchment Land Surface Model. Journal of Advances in Modeling Earth Systems, 2017, 9, 2771-2795.	1.3	8
160	An Observationâ€Driven Approach to Improve Vegetation Phenology in a Global Land Surface Model. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002083.	1.3	8
161	Improved Estimates of Pentad Precipitation Through the Merging of Independent Precipitation Data Sets. Water Resources Research, 2021, 57, .	1.7	8
162	Length Scales of Hydrological Variability as Inferred from SMAP Soil Moisture Retrievals. Journal of Hydrometeorology, 2019, 20, 2129-2146.	0.7	6

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163	A Systematic Approach to Assessing the Sources and Global Impacts of Errors in Climate Models. Journal of Climate, 2019, 32, 8301-8321.	1.2	6
164	Seasonal Variability in the Mechanisms behind the 2020 Siberian Heatwaves. Journal of Climate, 2022, 35, 3075-3090.	1.2	6
165	Exceptional Warmth in the Northern Hemisphere during Januaryâ€“March of 2020: The Roles of Unforced and Forced Modes of Atmospheric Variability. Journal of Climate, 2022, 35, 2565-2584.	1.2	6
166	A Modeling Study of the Causes and Predictability of the Spring 2011 Extreme U.S. Weather Activity. Journal of Climate, 2016, 29, 7869-7887.	1.2	5
167	Impact of a Regional U.S. Drought on Land and Atmospheric Carbon. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005599.	1.3	5
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