Randal D Koster

List of Publications by Citations

177 papers	26,684 citations	73 h-index	163 g-index
186 ext. papers	30,200 ext. citations	5.3 avg, IF	6.61 L-index

#	Paper	IF	Citations
177	MERRA: NASA's Modern-Era Retrospective Analysis for Research and Applications. *Journal of Climate*, **2011**, 24, 3624-3648	4.4	3548
176	The Modern-Era Retrospective Analysis for Research and Applications, Version 2 (MERRA-2). *Journal of Climate*, **2017**, Volume 30, 5419-5454	4.4	2815
175	Regions of strong coupling between soil moisture and precipitation. *Science*, **2004**, 305, 1138-40	33.3	1939
174	The Soil Moisture Active Passive (SMAP) Mission. *Proceedings of the IEEE*, **2010**, 98, 704-716	14.3	1845
173	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		572
172	GLACE: The Global Land-Atmosphere Coupling Experiment. Part I: Overview. *Journal of Hydrometeorology*, **2006**, 7, 590-610	3.7	525
171	Validity of the temperature reconstruction from water isotopes in ice cores. *Journal of Geophysical Research*, **1997**, 102, 26471-26487		456
170	On the cause of the 1930s Dust Bowl. *Science*, **2004**, 303, 1855-9	33.3	434
169	Bias reduction in short records of satellite soil moisture. *Geophysical Research Letters*, **2004**, 31,	4.9	409
168	On the Nature of Soil Moisture in Land Surface Models. *Journal of Climate*, **2009**, 22, 4322-4335	4.4	387
167	Modeling the land surface boundary in climate models as a composite of independent vegetation stands. *Journal of Geophysical Research*, **1992**, 97, 2697		370
166	Assessment and Enhancement of MERRA Land Surface Hydrology Estimates. *Journal of Climate*, **2011**, 24, 6322-6338	4.4	365
165	Variance and Predictability of Precipitation at Seasonal-to-Interannual Timescales. *Journal of Hydrometeorology*, **2000**, 1, 26-46	3.7	341
164	Soil Moisture Memory in Climate Models. *Journal of Hydrometeorology*, **2001**, 2, 558-570	3.7	327
163	Performance Metrics for Soil Moisture Retrievals and Application Requirements. *Journal of Hydrometeorology*, **2010**, 11, 832-840	3.7	308
162	GLACE: The Global Land-Atmosphere Coupling Experiment. Part II: Analysis. *Journal of Hydrometeorology*, **2006**, 7, 611-625	3.7	287
161	Contribution of land surface initialization to subseasonal forecast skill: First results from a multi-model experiment. *Geophysical Research Letters*, **2010**, 37, n/a-n/a	4.9	280

160	Extended versus Ensemble Kalman Filtering for Land Data Assimilation. *Journal of Hydrometeorology*, **2002**, 3, 728-740	3.7	278
159	Causes of Long-Term Drought in the U.S. Great Plains. *Journal of Climate*, **2004**, 17, 485-503	4.4	277
158	Cabauw Experimental Results from the Project for Intercomparison of Land-Surface Parameterization Schemes. *Journal of Climate*, **1997**, 10, 1194-1215	4.4	271
157	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,		271
156	Simulations of the HDO and H2 18O atmospheric cycles using the NASA GISS general circulation model: The seasonal cycle for present-day conditions. *Journal of Geophysical Research*, **1987**, 92, 14739		268
155	The Interplay between Transpiration and Runoff Formulations in Land Surface Schemes Used with Atmospheric Models. *Journal of Climate*, **1997**, 10, 1578-1591	4.4	264
154	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	4.4	260
153	Global Soil Moisture from Satellite Observations, Land Surface Models, and Ground Data: Implications for Data Assimilation. *Journal of Hydrometeorology*, **2004**, 5, 430-442	3.7	246
152	The Project for Intercomparison of Land-surface Parameterization Schemes (PILPS) Phase 2(c) Red–Arkansas River basin experiment:: 1. Experiment description and summary intercomparisons. *Global and Planetary Change*, **1998**, 19, 115-135	4.2	243
151	The Second Phase of the Global Land–Atmosphere Coupling Experiment: Soil Moisture Contributions to Subseasonal Forecast Skill. *Journal of Hydrometeorology*, **2011**, 12, 805-822	3.7	242
150	A Simple Framework for Examining the Interannual Variability of Land Surface Moisture Fluxes. *Journal of Climate*, **1999**, 12, 1911-1917	4.4	220
149	Soil Moisture Memory in AGCM Simulations: Analysis of Global Land–Atmosphere Coupling Experiment (GLACE) Data. *Journal of Hydrometeorology*, **2006**, 7, 1090-1112	3.7	212
148	Glacial-interglacial changes in moisture sources for greenland: influences on the ice core record of climate. *Science*, **1994**, 263, 508-11	33.3	199
147	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		198
146	Land Surface Precipitation in MERRA-2. *Journal of Climate*, **2017**, 30, 1643-1664	4.4	195
145	Skill in streamflow forecasts derived from large-scale estimates of soil moisture and snow. *Nature Geoscience*, **2010**, 3, 613-616	18.3	195
144	Observational evidence that soil moisture variations affect precipitation. *Geophysical Research Letters*, **2003**, 30, n/a-n/a	4.9	183
143	Do Global Models Properly Represent the Feedback between Land and Atmosphere?. *Journal of Hydrometeorology*, **2006**, 7, 1177-1198	3.7	180

142	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	8.1	179
141	Water isotopes in precipitation:. *Quaternary Science Reviews*, **2000**, 19, 363-379	3.9	179
140	Global assimilation of satellite surface soil moisture retrievals into the NASA Catchment land surface model. *Geophysical Research Letters*, **2005**, 32,	4.9	173
139	The Rhône-Aggregation Land Surface Scheme Intercomparison Project: An Overview. *Journal of Climate*, **2004**, 17, 187-208	4.4	161
138	Realistic Initialization of Land Surface States: Impacts on Subseasonal Forecast Skill. *Journal of Hydrometeorology*, **2004**, 5, 1049-1063	3.7	161
137	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	6.1	160
136	Assessment of MERRA-2 Land Surface Hydrology Estimates. *Journal of Climate*, **2017**, 30, 2937-2960	4.4	159
135	A land surface data assimilation framework using the land information system: Description and applications. *Advances in Water Resources*, **2008**, 31, 1419-1432	4.7	156
134	Global sources of local precipitation as determined by the Nasa/Giss GCM. *Geophysical Research Letters*, **1986**, 13, 121-124	4.9	155
133	Role of Subsurface Physics in the Assimilation of Surface Soil Moisture Observations. *Journal of Hydrometeorology*, **2009**, 10, 1534-1547	3.7	145
132	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	13.2	142
131	Assessment of the SMAP Level-4 Surface and Root-Zone Soil Moisture Product Using In Situ Measurements. *Journal of Hydrometeorology*, **2017**, 18, 2621-2645	3.7	139
130	Multimodel Ensemble Reconstruction of Drought over the Continental United States. *Journal of Climate*, **2009**, 22, 2694-2712	4.4	139
129	The Project for Intercomparison of Land-surface Parameterization Schemes (PILPS) phase 2(c) Red–Arkansas River basin experiment:. *Global and Planetary Change*, **1998**, 19, 161-179	4.2	137
128	A Comparative Analysis of Two Land Surface Heterogeneity Representations. *Journal of Climate*, **1992**, 5, 1379-1390	4.4	135
127	Northern Eurasian Heat Waves and Droughts. *Journal of Climate*, **2014**, 27, 3169-3207	4.4	133
126	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	6	126
125	Snow Cover and Snow Mass Intercomparisons of General Circulation Models and Remotely Sensed Datasets. *Journal of Climate*, **1996**, 9, 409-426	4.4	124

124	Analyzing the Concurrence of Meteorological Droughts and Warm Periods, with Implications for the Determination of Evaporative Regime. *Journal of Climate*, **2009**, 22, 3331-3341	4.4	121
123	Stable water isotope behavior during the last glacial maximum: A general circulation model analysis. *Journal of Geophysical Research*, **1994**, 99, 25791		118
122	Global Meteorological Drought: A Synthesis of Current Understanding with a Focus on SST Drivers of Precipitation Deficits. *Journal of Climate*, **2016**, 29, 3989-4019	4.4	118
121	Assessing the Impact of Horizontal Error Correlations in Background Fields on Soil Moisture Estimation. *Journal of Hydrometeorology*, **2003**, 4, 1229-1242	3.7	112
120	Assimilation of Satellite-Derived Skin Temperature Observations into Land Surface Models. *Journal of Hydrometeorology*, **2010**, 11, 1103-1122	3.7	109
119	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	3.7	108
118	Impact of Land Surface Initialization on Seasonal Precipitation and Temperature Prediction. *Journal of Hydrometeorology*, **2003**, 4, 408-423	3.7	106
117	Soil Moisture, Snow, and Seasonal Streamflow Forecasts in the United States. *Journal of Hydrometeorology*, **2012**, 13, 189-203	3.7	105
116	Relative contributions of land and ocean processes to precipitation variability. *Journal of Geophysical Research*, **1995**, 100, 13775		101
115	Comparing the Degree of Land□Atmosphere Interaction in Four Atmospheric General Circulation Models. *Journal of Hydrometeorology*, **2002**, 3, 363-375	3.7	100
114	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	5.5	97
113	The Sensitivity of Surface Fluxes to Soil Water Content in Three Land Surface Schemes. *Journal of Hydrometeorology*, **2000**, 1, 121-134	3.7	95
112	Key results and implications from phase 1(c) of the Project for Intercomparison of Land-surface Parametrization Schemes. *Climate Dynamics*, **1999**, 15, 673-684	4.2	92
111	Soil moisture effects on seasonal temperature and precipitation forecast scores in Europe. *Climate Dynamics*, **2012**, 38, 349-362	4.2	91
110	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	6.1	80
109	The components of a □SVAT□scheme and their effects on a GCM's hydrological cycle. *Advances in Water Resources*, **1994**, 17, 61-78	4.7	80
108	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	4.2	79
107	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	7.1	77

106	Contribution of soil moisture retrievals to land data assimilation products. *Geophysical Research Letters*, **2008**, 35,	4.9	74
105	Global Assessment of the SMAP Level-4 Surface and Root-Zone Soil Moisture Product Using Assimilation Diagnostics. *Journal of Hydrometeorology*, **2017**, 18, 3217-3237	3.7	73
104	Simulations of the HDO and H2 18O atmospheric cycles using the NASA GISS general circulation model: Sensitivity experiments for present-day conditions. *Journal of Geophysical Research*, **1991**, 96, 7495		73
103	The Subseasonal Experiment (SubX): A Multimodel Subseasonal Prediction Experiment. *Bulletin of the American Meteorological Society*, **2019**, 100, 2043-2060	6.1	72
102	A reconsideration of the initial conditions used for stable water isotope models. *Journal of Geophysical Research*, **1996**, 101, 22933-22938		67
101	Potential Predictability of Long-Term Drought and Pluvial Conditions in the U.S. Great Plains. *Journal of Climate*, **2008**, 21, 802-816	4.4	65
100	Land Surface Controls on Hydroclimatic Means and Variability. *Journal of Hydrometeorology*, **2012**, 13, 1604-1620	3.7	63
99	Sources of Sahel Precipitation for Simulated Drought and Rainy Seasons. *Journal of Climate*, **1989**, 2, 1438-1446	4.4	62
98	Precipitation Estimation Using L-Band and C-Band Soil Moisture Retrievals. *Water Resources Research*, **2016**, 52, 7213-7225	5.4	61
97	Confronting weather and climate models with observational data from soil moisture networks over the United States. *Journal of Hydrometeorology*, **2016**, 17, 1049-1067	3.7	60
96	Continental water recycling and H218O concentrations. *Geophysical Research Letters*, **1993**, 20, 2215-2218	4.9	58
95	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	4.4	57
94	The Influence of Land Surface Moisture Retention on Precipitation Statistics. *Journal of Climate*, **1996**, 9, 2551-2567	4.4	54
93	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	13.2	53
92	Version 4 of the SMAP Level-4 Soil Moisture Algorithm and Data Product. *Journal of Advances in Modeling Earth Systems*, **2019**, 11, 3106-3130	7.1	52
91	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	4.4	51
90	Deuterium excess in Greenland snow: Analysis with simple and complex models. *Journal of Geophysical Research*, **1998**, 103, 8947-8953		51
89	Origin of July Antarctic precipitation and its influence on deuterium content: a GCM analysis. *Climate Dynamics*, **1992**, 7, 195-203	4.2	51

88	The origin of Antarctic precipitation: a modelling approach. *Tellus, Series B: Chemical and Physical Meteorology*, **2000**, 52, 19-36	3.3	50
87	Assessment of MERRA-2 Land Surface Energy Flux Estimates. *Journal of Climate*, **2018**, 31, 671-691	4.4	48
86	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,		48
85	Influence of the Interannual Variability of Vegetation on the Surface Energy Balance—A Global Sensitivity Study. *Journal of Hydrometeorology*, **2002**, 3, 617-629	3.7	47
84	Verification of land-atmosphere coupling in forecast models, reanalyses and land surface models using flux site observations. *Journal of Hydrometeorology*, **2018**, 19, 375-392	3.7	46
83	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	3.7	46
82	Relevance of time-varying and time-invariant retrieval error sources on the utility of spaceborne soil moisture products. *Geophysical Research Letters*, **2005**, 32,	4.9	46
81	The origin of Antarctic precipitation: a modelling approach. *Tellus, Series B: Chemical and Physical Meteorology*, **2000**, 52, 19-36	3.3	46
80	Rebound in Atmospheric Predictability and the Role of the Land Surface. *Journal of Climate*, **2012**, 25, 4744-4749	4.4	44
79	Large Scale Influences on Summertime Extreme Precipitation in the Northeastern United States. *Journal of Hydrometeorology*, **2016**, Volume 17, 3045-3061	3.7	42
78	A Mechanism for Land–Atmosphere Feedback Involving Planetary Wave Structures. *Journal of Climate*, **2014**, 27, 9290-9301	4.4	41
77	African Easterly Jet: Structure and Maintenance. *Journal of Climate*, **2009**, 22, 4459-4480	4.4	41
76	A Revised Framework for Analyzing Soil Moisture Memory in Climate Data: Derivation and Interpretation. *Journal of Hydrometeorology*, **2012**, 13, 404-412	3.7	40
75	Validity of the isotopic thermometer in central Antarctica: Limited impact of glacial precipitation seasonality and moisture origin. *Geophysical Research Letters*, **2000**, 27, 2677-2680	4.9	40
74	Flash Drought as Captured by Reanalysis Data: Disentangling the Contributions of Precipitation Deficit and Excess Evapotranspiration. *Journal of Hydrometeorology*, **2019**, 20, 1241-1258	3.7	37
73	The Physical Mechanisms by Which the Leading Patterns of SST Variability Impact U.S. Precipitation. *Journal of Climate*, **2010**, 23, 1815-1836	4.4	37
72	Timescales of Land Surface Evapotranspiration Response. *Journal of Climate*, **1997**, 10, 559-566	4.4	35
71	GEOS-S2S Version 2: The GMAO High Resolution Coupled Model and Assimilation System for Seasonal Prediction. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2019JD031767	4.4	34

70	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	2.1	33
69	The role of soil moisture initialization in subseasonal and seasonal streamflow prediction A case study in Sri Lanka. *Advances in Water Resources*, **2008**, 31, 1333-1343	4.7	32
68	MEETING SUMMARIES. *Bulletin of the American Meteorological Society*, **2007**, 88, 1625-1634	6.1	30
67	Inferring Soil Moisture Memory from Streamflow Observations Using a Simple Water Balance Model. *Journal of Hydrometeorology*, **2013**, 14, 1773-1790	3.7	28
66	Suggestions in the Observational Record of Land Atmosphere Feedback Operating at Seasonal Time Scales. *Journal of Hydrometeorology*, **2004**, 5, 567-572	3.7	28
65	The global geochemistry of bomb-produced tritium: General circulation model compared to available observations and traditional interpretations. *Journal of Geophysical Research*, **1989**, 94, 18305		28
64	Improved Hydrological Simulation Using SMAP Data: Relative Impacts of Model Calibration and Data Assimilation. *Journal of Hydrometeorology*, **2018**, 19, 727-741	3.7	27
63	Phenological versus meteorological controls on land-atmosphere water and carbon fluxes. *Journal of Geophysical Research G: Biogeosciences*, **2013**, 118, 14-29	3.7	27
62	Seasonal precipitation timing and ice core records. *Science*, **1995**, 269, 247-8	33.3	27
61	Impact of Subsurface Temperature Variability on Surface Air Temperature Variability: An AGCM Study. *Journal of Hydrometeorology*, **2008**, 9, 804-815	3.7	25
60	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	5.4	24
59	Effect of a Canopy Interception Reservoir on Hydrological Persistence in a General Circulation Model. *Journal of Climate*, **1995**, 8, 1917-1922	4.4	24
58	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,		22
57	Intercomparison of Soil Moisture Memory in Two Land Surface Models. *Journal of Hydrometeorology*, **2003**, 4, 1134-1146	3.7	22
56	A One-Dimensional Interactive Soil-Atmosphere Model for Testing Formulations of Surface Hydrology. *Journal of Climate*, **1990**, 3, 593-606	4.4	22
55	Estimating Basin-Scale Water Budgets with SMAP Soil Moisture Data. *Water Resources Research*, **2018**, 54, 4228-4244	5.4	22
54	Hydroclimatic Variability and Predictability: A Survey of Recent Research. *Hydrology and Earth System Sciences*, **2017**, 21, 3777-3798	5.5	21
53	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	4.2	21

52	Estimation of Predictability with a Newly Derived Index to Quantify Similarity among Ensemble Members. *Monthly Weather Review*, **2007**, 135, 2674-2687	2.4	20
51	Distinct Hydrological Signatures in Observed Historical Temperature Fields. *Journal of Hydrometeorology*, **2006**, 7, 1061-1075	3.7	19
50	Simulation of high-latitude hydrological processes in the Torne Kalix basin: PILPS Phase 2(e). *Global and Planetary Change*, **2003**, 38, 55-71	4.2	19
49	Hydroclimatic Controls on the Means and Variability of Vegetation Phenology and Carbon Uptake. *Journal of Climate*, **2014**, 27, 5632-5652	4.4	18
48	AGCM Biases in Evaporation Regime: Impacts on Soil Moisture Memory and Land Atmosphere Feedback. *Journal of Hydrometeorology*, **2005**, 6, 656-669	3.7	18
47	The Offline Validation of Land Surface Models. *Journal of the Meteorological Society of Japan*, **1999**, 77, 257-263	2.8	18
46	SMAP Level 4 Surface and Root Zone Soil Moisture **2016**,		17
45	A Data-Driven Approach for Daily Real-Time Estimates and Forecasts of Near-Surface Soil Moisture. *Journal of Hydrometeorology*, **2017**, 18, 837-843	3.7	16
44	fficiency Space A Framework for Evaluating Joint Evaporation and Runoff Behavior*. *Bulletin of the American Meteorological Society*, **2015**, 96, 393-396	6.1	16
43	Impacts of Snow Darkening by Deposition of Light-Absorbing Aerosols on Hydroclimate of Eurasia During Boreal Spring and Summer. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 8441-8461	4.4	16
42	Recent Advances in Land Data Assimilation at the NASA Global Modeling and Assimilation Office **2009**, 407-428		16
41	The NASA Hydrological Forecast System for Food and Water Security Applications. *Bulletin of the American Meteorological Society*, **2020**, 101, E1007-E1025	6.1	15
40	PEAT-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	7.1	15
39	Permafrost variability over the Northern Hemisphere based on the MERRA-2 reanalysis. *Cryosphere*, **2019**, 13, 2087-2110	5.5	14
38	Interactive Vegetation Phenology, Soil Moisture, and Monthly Temperature Forecasts. *Journal of Hydrometeorology*, **2015**, 16, 1456-1465	3.7	13
37	Soil Moisture Initialization Error and Subgrid Variability of Precipitation in Seasonal Streamflow Forecasting. *Journal of Hydrometeorology*, **2014**, 15, 69-88	3.7	13
36	Drought-Induced Warming in the Continental United States under Different SST Regimes. *Journal of Climate*, **2009**, 22, 5385-5400	4.4	13
35	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	4.4	13

34	Phase Locking of the Boreal Summer Atmospheric Response to Dry Land Surface Anomalies in the Northern Hemisphere. *Journal of Climate*, **2019**, 32, 1081-1099	4.4	11
33	Seasonal variation of land□atmosphere coupling strength over the West African monsoon region in an atmospheric general circulation model. *Hydrological Sciences Journal*, **2013**, 58, 1276-1286	3.5	11
32	The pattern across the continental United States of evapotranspiration variability associated with water availability. *Frontiers in Earth Science*, **2015**, 3,	3.5	11
31	Influence of Land Surface Fluxes on Precipitation: Inferences from Simulations Forced with Four ARM□ART SCM Datasets. *Journal of Climate*, **2001**, 14, 3666-3691	4.4	11
30	A catchment-based land surface model for GCMS and the framework for its evaluation. *Physics and Chemistry of the Earth*, **1999**, 24, 769-773		11
29	Attribution of the 2017 Northern High Plains Drought. *Bulletin of the American Meteorological Society*, **2019**, 100, S25-S29	6.1	9
28	Prediction Skill of the 2012 U.S. Great Plains Flash Drought in Subseasonal Experiment (SubX) Models. *Journal of Climate*, **2020**, 33, 6229-6253	4.4	9
27	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	3.9	8
26	Mechanisms Associated with Daytime and Nighttime Heat Waves over the Contiguous United States. *Journal of Applied Meteorology and Climatology*, **2020**, 59, 1865-1882	2.7	7
25	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	4.4	7
24	The impact of spatiotemporal variability in atmospheric CO₂ concentration on global terrestrial carbon fluxes. *Biogeosciences*, **2018**, 15, 5635-5652	4.6	7
23	Evaluation and enhancement of permafrost modeling with the NASA Catchment Land Surface Model. *Journal of Advances in Modeling Earth Systems*, **2017**, 9, 2771-2795	7.1	6
22	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	3.7	6
21	Evaluating the utility of satellite soil moisture retrievals over irrigated areas and the ability of land data assimilation methods to correct for unmodeled processes		5
20	Investigation of the 2016 Eurasia heat wave as an event of the recent warming. *Environmental Research Letters*, **2020**, 15, 114018	6.2	5
19	A Systematic Approach to Assessing the Sources and Global Impacts of Errors in Climate Models. *Journal of Climate*, **2019**, 32, 8301-8321	4.4	4
18	Using Observed Spatial Correlation Structures to Increase the Skill of Subseasonal Forecasts. *Monthly Weather Review*, **2008**, 136, 1923-1930	2.4	4
17	Multiple spaceborne water cycle observations would aid modeling. *Eos*, **2006**, 87, 149	1.5	4

16	Length Scales of Hydrological Variability as Inferred from SMAP Soil Moisture Retrievals. *Journal of Hydrometeorology*, **2019**, 20, 2129-2146	3.7	3
15	Impact of a Regional U.S. Drought on Land and Atmospheric Carbon. *Journal of Geophysical Research G: Biogeosciences*, **2020**, 125, e2019JG005599	3.7	3
14	Correction to 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*, **2012**, 117, n/a-n/a		3
13	Comparing GCM-generated land surface water budgets using a simple common framework. *Water Science and Application*, **2001**, 95-105		3
12	A Modeling Study of the Causes and Predictability of the Spring 2011 Extreme US Weather Activity. *Journal of Climate*, **2016**, 29, 7869-7887	4.4	3
11	An Observation-Driven Approach to Improve Vegetation Phenology in a Global Land Surface Model. *Journal of Advances in Modeling Earth Systems*, **2020**, 12, e2020MS002083	7.1	2
10	Exceptional Warmth in the Northern Hemisphere during January through March of 2020: The Roles of Unforced and Forced Modes of Atmospheric Variability. *Journal of Climate*, **2022**, 1-56	4.4	2
9	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	3.7	2
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