Rolf H Reichle

List of Publications by Citations

155 papers	18,997 citations	60 h-index	137 g-index
179 ext. papers	22,299 ext. citations	5.8 avg, IF	6.66 L-index

#	Paper	IF	Citations
155	MERRA: NASA's Modern-Era Retrospective Analysis for Research and Applications. *Journal of Climate*, **2011**, 24, 3624-3648	4.4	3548
154	The Modern-Era Retrospective Analysis for Research and Applications, Version 2 (MERRA-2). *Journal of Climate*, **2017**, Volume 30, 5419-5454	4.4	2815
153	The Soil Moisture Active Passive (SMAP) Mission. *Proceedings of the IEEE*, **2010**, 98, 704-716	14.3	1845
152	Hydrologic Data Assimilation with the Ensemble Kalman Filter. *Monthly Weather Review*, **2002**, 130, 103-114	4.4	669
151	Bias reduction in short records of satellite soil moisture. *Geophysical Research Letters*, **2004**, 31,	4.9	409
150	Assessment and Enhancement of MERRA Land Surface Hydrology Estimates. *Journal of Climate*, **2011**, 24, 6322-6338	4.4	365
149	Data assimilation methods in the Earth sciences. *Advances in Water Resources*, **2008**, 31, 1411-1418	4.7	338
148	Performance Metrics for Soil Moisture Retrievals and Application Requirements. *Journal of Hydrometeorology*, **2010**, 11, 832-840	3.7	308
147	Assimilation of GRACE Terrestrial Water Storage Data into a Land Surface Model: Results for the Mississippi River Basin. *Journal of Hydrometeorology*, **2008**, 9, 535-548	3.7	301
146	Extended versus Ensemble Kalman Filtering for Land Data Assimilation. *Journal of Hydrometeorology*, **2002**, 3, 728-740	3.7	278
145	Global intercomparison of 12 land surface heat flux estimates. *Journal of Geophysical Research*, **2011**, 116,		271
144	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
143	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
142	Drought indicators based on model-assimilated Gravity Recovery and Climate Experiment (GRACE) terrestrial water storage observations. *Water Resources Research*, **2012**, 48,	5.4	243
141	Land Surface Precipitation in MERRA-2. *Journal of Climate*, **2017**, 30, 1643-1664	4.4	195
140	Skill in streamflow forecasts derived from large-scale estimates of soil moisture and snow. *Nature Geoscience*, **2010**, 3, 613-616	18.3	195
139	Assimilation of passive and active microwave soil moisture retrievals. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	179

138	An adaptive ensemble Kalman filter for soil moisture data assimilation. *Water Resources Research*, **2008**, 44,	5.4	173
137	Global assimilation of satellite surface soil moisture retrievals into the NASA Catchment land surface model. *Geophysical Research Letters*, **2005**, 32,	4.9	173
136	Skill and Global Trend Analysis of Soil Moisture from Reanalyses and Microwave Remote Sensing. *Journal of Hydrometeorology*, **2013**, 14, 1259-1277	3.7	162
135	Realistic Initialization of Land Surface States: Impacts on Subseasonal Forecast Skill. *Journal of Hydrometeorology*, **2004**, 5, 1049-1063	3.7	161
134	Assessment of MERRA-2 Land Surface Hydrology Estimates. *Journal of Climate*, **2017**, 30, 2937-2960	4.4	159
133	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
132	Downscaling of radio brightness measurements for soil moisture estimation: A four-dimensional variational data assimilation approach. *Water Resources Research*, **2001**, 37, 2353-2364	5.4	149
131	Role of Subsurface Physics in the Assimilation of Surface Soil Moisture Observations. *Journal of Hydrometeorology*, **2009**, 10, 1534-1547	3.7	145
130	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
129	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
128	Global-scale comparison of passive (SMOS) and active (ASCAT) satellite based microwave soil moisture retrievals with soil moisture simulations (MERRA-Land). *Remote Sensing of Environment*, **2014**, 152, 614-626	13.2	135
127	Assimilation of Remotely Sensed Soil Moisture and Snow Depth Retrievals for Drought Estimation. *Journal of Hydrometeorology*, **2014**, 15, 2446-2469	3.7	127
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	Estimating root mean square errors in remotely sensed soil moisture over continental scale domains. *Remote Sensing of Environment*, **2013**, 137, 288-298	13.2	126
124	Multiscale assimilation of Advanced Microwave Scanning Radiometer-EOS snow water equivalent and Moderate Resolution Imaging Spectroradiometer snow cover fraction observations in northern Colorado. *Water Resources Research*, **2012**, 48,	5.4	125
123	The Contributions of Precipitation and Soil Moisture Observations to the Skill of Soil Moisture Estimates in a Land Data Assimilation System. *Journal of Hydrometeorology*, **2011**, 12, 750-765	3.7	117
122	Satellite-Scale Snow Water Equivalent Assimilation into a High-Resolution Land Surface Model. *Journal of Hydrometeorology*, **2010**, 11, 352-369	3.7	115
121	An integrated hydrologic modeling and data assimilation framework. *Computer*, **2008**, 41, 52-59	1.6	112

120	Assessing the Impact of Horizontal Error Correlations in Background Fields on Soil Moisture Estimation. *Journal of Hydrometeorology*, **2003**, 4, 1229-1242	3.7	112
119	Variational data assimilation of microwave radiobrightness observations for land surface hydrology applications. *IEEE Transactions on Geoscience and Remote Sensing*, **2001**, 39, 1708-1718	8.1	112
118	Assimilation of Satellite-Derived Skin Temperature Observations into Land Surface Models. *Journal of Hydrometeorology*, **2010**, 11, 1103-1122	3.7	109
117	Global Calibration of the GEOS-5 L-Band Microwave Radiative Transfer Model over Nonfrozen Land Using SMOS Observations. *Journal of Hydrometeorology*, **2013**, 14, 765-785	3.7	107
116	Soil Moisture, Snow, and Seasonal Streamflow Forecasts in the United States. *Journal of Hydrometeorology*, **2012**, 13, 189-203	3.7	105
115	A comparison of methods for a priori bias correction in soil moisture data assimilation. *Water Resources Research*, **2012**, 48,	5.4	100
114	Assimilation of Gridded GRACE Terrestrial Water Storage Estimates in the North American Land Data Assimilation System. *Journal of Hydrometeorology*, **2016**, 17, 1951-1972	3.7	99
113	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
112	. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **2017**, 10, 489-502	4.7	93
111	Correcting for forecast bias in soil moisture assimilation with the ensemble Kalman filter. *Water Resources Research*, **2007**, 43,	5.4	93
110	Assimilation and downscaling of satellite observed soil moisture over the Little River Experimental Watershed in Georgia, USA. *Advances in Water Resources*, **2013**, 52, 19-33	4.7	91
109	Global Assimilation of Multiangle and Multipolarization SMOS Brightness Temperature Observations into the GEOS-5 Catchment Land Surface Model for Soil Moisture Estimation. *Journal of Hydrometeorology*, **2016**, 17, 669-691	3.7	90
108	Snow depth variability in the Northern Hemisphere mountains observed from space. *Nature Communications*, **2019**, 10, 4629	17.4	86
107	Assimilation of terrestrial water storage from GRACE in a snow-dominated basin. *Water Resources Research*, **2012**, 48,	5.4	84
106	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
105	Assimilation of SMOS brightness temperatures or soil moisture retrievals into a land surface model. *Hydrology and Earth System Sciences*, **2016**, 20, 4895-4911	5.5	77
104	Joint Sentinel-1 and SMAP data assimilation to improve soil moisture estimates. *Geophysical Research Letters*, **2017**, 44, 6145-6153	4.9	75
103	Contribution of soil moisture retrievals to land data assimilation products. *Geophysical Research Letters*, **2008**, 35,	4.9	74

102	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
101	Assimilation of gridded terrestrial water storage observations from GRACE into a land surface model. *Water Resources Research*, **2016**, 52, 4164-4183	5.4	72
100	Evaluation of MERRA Land Surface Estimates in Preparation for the Soil Moisture Active Passive Mission. *Journal of Climate*, **2011**, 24, 3797-3816	4.4	71
99	Validation practices for satellite soil moisture retrievals: What are (the) errors?. *Remote Sensing of Environment*, **2020**, 244, 111806	13.2	70
98	Benefits and Pitfalls of GRACE Data Assimilation: a Case Study of Terrestrial Water Storage Depletion in India. *Geophysical Research Letters*, **2017**, 44, 4107-4115	4.9	66
97	Assimilating remote sensing observations of leaf area index and soil moisture for wheat yield estimates: An observing system simulation experiment. *Water Resources Research*, **2012**, 48,	5.4	65
96	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	5.5	61
95	Satellite and In Situ Observations for Advancing Global Earth Surface Modelling: A Review. *Remote Sensing*, **2018**, 10, 2038	5	60
94	L-band microwave remote sensing and land data assimilation improve the representation of pre-storm soil moisture conditions for hydrologic forecasting. *Geophysical Research Letters*, **2017**, 44, 5495-5503	4.9	59
93	Estimating surface soil moisture from SMAP observations using a Neural Network technique. *Remote Sensing of Environment*, **2018**, 204, 43-59	13.2	59
92	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
91	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
90	Connecting Satellite Observations with Water Cycle Variables Through Land Data Assimilation: Examples Using the NASA GEOS-5 LDAS. *Surveys in Geophysics*, **2014**, 35, 577-606	7.6	49
89	Assessment of MERRA-2 Land Surface Energy Flux Estimates. *Journal of Climate*, **2018**, 31, 671-691	4.4	48
88	Development of a hydrometeorological forcing data set for global soil moisture estimation. *International Journal of Climatology*, **2005**, 25, 1697-1714	3.5	47
87	Comparison of adaptive filtering techniques for land surface data assimilation. *Water Resources Research*, **2008**, 44,	5.4	46
86	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
85	. *IEEE Transactions on Geoscience and Remote Sensing*, **2017**, 55, 6517-6532	8.1	45

84	Exploiting soil moisture, precipitation and streamflow observations to evaluate soil moisture/runoff coupling in land surface models. *Geophysical Research Letters*, **2018**, 45, 4869-4878	4.9	40
83	Assessing global surface water inundation dynamics using combined satellite information from SMAP, AMSR2 and Landsat. *Remote Sensing of Environment*, **2018**, 213, 1-17	13.2	39
82	An assessment of surface soil temperature products from numerical weather prediction models using ground-based measurements. *Water Resources Research*, **2012**, 48,	5.4	38
81	The Effect of Satellite Rainfall Error Modeling on Soil Moisture Prediction Uncertainty. *Journal of Hydrometeorology*, **2011**, 12, 413-428	3.7	38
80	A roadmap for high-resolution satellite soil moisture applications □confronting product characteristics with user requirements. *Remote Sensing of Environment*, **2021**, 252, 112162	13.2	38
79	Merging active and passive microwave observations in soil moisture data□assimilation. *Remote Sensing of Environment*, **2017**, 191, 117-130	13.2	35
78	Clarifications on the □omparison Between SMOS, VUA, ASCAT, and ECMWF Soil Moisture Products Over Four Watersheds in U.S.□*IEEE Transactions on Geoscience and Remote Sensing*, **2014**, 52, 1901-1906	8.1	35
77	New technologies require advances in hydrologic data assimilation. *Eos*, **2003**, 84, 545	1.5	35
76	Assimilation of global radar backscatter and radiometer brightness temperature observations to improve soil moisture and land evaporation□estimates. *Remote Sensing of Environment*, **2017**, 189, 194-210	13.2	33
75	. *IEEE Transactions on Geoscience and Remote Sensing*, **2010**, 48, 1955-1967	8.1	32
74	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
73	Uncertainty quantification of GEOS-5 L-band radiative transfer model parameters using Bayesian inference and SMOS observations. *Remote Sensing of Environment*, **2014**, 148, 146-157	13.2	30
72	Converting Between SMOS and SMAP Level-1 Brightness Temperature Observations Over Nonfrozen Land. *IEEE Geoscience and Remote Sensing Letters*, **2015**, 12, 1908-1912	4.1	30
71	Characterizing permafrost active layer dynamics and sensitivity to landscape spatial heterogeneity in Alaska. *Cryosphere*, **2018**, 12, 145-161	5.5	29
70	Improved Hydrological Simulation Using SMAP Data: Relative Impacts of Model Calibration and Data Assimilation. *Journal of Hydrometeorology*, **2018**, 19, 727-741	3.7	27
69	Consistency of Estimated Global Water Cycle Variations over the Satellite Era. *Journal of Climate*, **2014**, 27, 6135-6154	4.4	27
68	Recent climate and fire disturbance impacts on boreal and arctic ecosystem productivity estimated using a satellite-based terrestrial carbon flux model. *Journal of Geophysical Research G: Biogeosciences*, **2013**, 118, 606-622	3.7	26
67	Data Assimilation to extract Soil Moisture Information from SMAP Observations. *Remote Sensing*, **2017**, 9, 1179	5	25

66	Using a Support Vector Machine and a Land Surface Model to Estimate Large-Scale Passive Microwave Brightness Temperatures Over Snow-Covered Land in North America. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **2015**, 8, 4431-4441	4.7	25
65	Impact of Subsurface Temperature Variability on Surface Air Temperature Variability: An AGCM Study. *Journal of Hydrometeorology*, **2008**, 9, 804-815	3.7	25
64	Assimilation of MODIS Snow Cover Fraction Observations into the NASA Catchment Land Surface Model. *Remote Sensing*, **2018**, 10, 316	5	24
63	. *IEEE Transactions on Geoscience and Remote Sensing*, **2014**, 52, 235-248	8.1	24
62	Multi-sensor assimilation of SMOS brightness temperature and GRACE terrestrial water storage observations for soil moisture and shallow groundwater estimation. *Remote Sensing of Environment* , **2019**, 227, 12-27	13.2	23
61	The impact of model and rainfall forcing errors on characterizing soil moisture uncertainty in land surface modeling. *Hydrology and Earth System Sciences*, **2012**, 16, 3499-3515	5.5	23
60	Estimating snow mass in North America through assimilation of AMSR-E brightness temperature observations using the Catchment land surface model and support vector machines. *Water Resources Research*, **2018**, 54, 6488-6509	5.4	22
59	Estimating Basin-Scale Water Budgets with SMAP Soil Moisture Data. *Water Resources Research*, **2018**, 54, 4228-4244	5.4	22
58	The impact of near-surface soil moisture assimilation at subseasonal, seasonal, and inter-annual timescales. *Hydrology and Earth System Sciences*, **2015**, 19, 4831-4844	5.5	20
57	Spring hydrology determines summer net carbon uptake in northern ecosystems. *Environmental Research Letters*, **2014**, 9, 064003	6.2	20
56	A Global Assessment of Added Value in the SMAP Level 4 Soil Moisture Product Relative to Its Baseline Land Surface Model. *Geophysical Research Letters*, **2019**, 46, 6604-6613	4.9	19
55	The spatial scale of model errors and assimilated retrievals in a terrestrial water storage assimilation system. *Water Resources Research*, **2013**, 49, 7457-7468	5.4	19
54	Increased high-latitude photosynthetic carbon gain offset by respiration carbon loss during an anomalous warm winter to spring transition. *Global Change Biology*, **2020**, 26, 682-696	11.4	19
53	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
52	Homogeneity of a global multisatellite soil moisture climate data record. *Geophysical Research Letters*, **2016**, 43, 11,245	4.9	16
51	Retrieving Clear-Sky Surface Skin Temperature for Numerical Weather Prediction Applications from Geostationary Satellite Data. *Remote Sensing*, **2013**, 5, 342-366	5	16
50	Recent Advances in Land Data Assimilation at the NASA Global Modeling and Assimilation Office **2009**, 407-428		16
49	A Dynamic Approach to Addressing Observation-Minus-Forecast Bias in a Land Surface Skin Temperature Data Assimilation System. *Journal of Hydrometeorology*, **2015**, 16, 449-464	3.7	15

48	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
47	Permafrost variability over the Northern Hemisphere based on the MERRA-2 reanalysis. *Cryosphere*, **2019**, 13, 2087-2110	5.5	14
46	Effective parameters in heterogeneous and homogeneous transport models with kinetic sorption. *Water Resources Research*, **1998**, 34, 583-594	5.4	14
45	Assimilation of SMAP and ASCAT soil moisture retrievals into the JULES land surface model using the Local Ensemble Transform Kalman Filter. *Remote Sensing of Environment*, **2021**, 253, 112222	13.2	14
44	Assimilation of Freeze‐Thaw Observations into the NASA Catchment Land Surface Model. *Journal of Hydrometeorology*, **2015**, 16, 730-743	3.7	13
43	Diagnosing Bias in Modeled Soil Moisture/Runoff Coefficient Correlation Using the SMAP Level 4 Soil Moisture Product. *Water Resources Research*, **2019**, 55, 7010-7026	5.4	13
42	Soil Moisture Initialization Error and Subgrid Variability of Precipitation in Seasonal Streamflow Forecasting. *Journal of Hydrometeorology*, **2014**, 15, 69-88	3.7	13
41	The Efficiency of Assimilating Satellite Soil Moisture Retrievals in a Land Data Assimilation System Using Different Rainfall Error Models. *Journal of Hydrometeorology*, **2013**, 14, 368-374	3.7	13
40	Recent Amplified Global Gross Primary Productivity Due to Temperature Increase Is Offset by Reduced Productivity Due to Water Constraints. *AGU Advances*, **2020**, 1, e2020AV000180	5.4	13
39	Using SMAP Level-4 soil moisture to constrain MOD16 evapotranspiration over the contiguous USA. *Remote Sensing of Environment*, **2021**, 255, 112277	13.2	12
38	Assimilation of Satellite Soil Moisture for Improved Atmospheric Reanalyses. *Monthly Weather Review*, **2019**, 147, 2163-2188	2.4	11
37	Synergistic use of SMAP and OCO-2 data in assessing the responses of ecosystem productivity to the 2018 U.S. drought. *Remote Sensing of Environment*, **2020**, 251, 112062	13.2	11
36	Uncertainty in Soil Moisture Retrievals: an Ensemble Approach using SMOS L-Band Microwave Data. *Remote Sensing of Environment*, **2019**, 229, 133-147	13.2	9
35	Global Satellite Retrievals of the Near-Surface Atmospheric Vapor Pressure Deficit from AMSR-E and AMSR2. *Remote Sensing*, **2018**, 10,	5	9
34	Validation of Soil Moisture Data Products From the NASA SMAP Mission. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **2022**, 15, 364-392	4.7	9
33	The Impact of Rainfall Error Characterization on the Estimation of Soil Moisture Fields in a Land Data Assimilation System. *Journal of Hydrometeorology*, **2012**, 13, 1107-1118	3.7	8
32	Connecting Satellite Observations with Water Cycle Variables Through Land Data Assimilation: Examples Using the NASA GEOS-5 LDAS. *Space Sciences Series of ISSI*, **2013**, 577-606	0.1	7
31	Using enhanced GRACE water storage data to improve drought detection by the U.S. and North American Drought Monitors **2010**,		7

30	Improved groundwater table and L-band brightness temperature estimates for Northern Hemisphere peatlands using new model physics and SMOS observations in a global data assimilation framework. *Remote Sensing of Environment*, **2020**, 246, 111805	13.2	6
29	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
28	The contributions of precipitation and soil moisture observations to the skill of soil moisture estimates in a land data assimilation system. *Journal of Hydrometeorology*,110404091221083	3.7	6
27	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
26	Consistency Between NASS Surveyed Soil Moisture Conditions and SMAP Soil Moisture Observations. *Water Resources Research*, **2019**, 55, 7682-7693	5.4	5
25	Below-surface water mediates the response of African forests to reduced rainfall. *Environmental Research Letters*, **2020**, 15, 034063	6.2	5
24	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
23	Spatial and temporal variability of root-zone soil moisture acquired from hydrologic modeling and AirMOSS P-band radar. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **2018**, 11, 4578-4590	4.7	5
22	Using Observed Spatial Correlation Structures to Increase the Skill of Subseasonal Forecasts. *Monthly Weather Review*, **2008**, 136, 1923-1930	2.4	4
21	Multiple spaceborne water cycle observations would aid modeling. *Eos*, **2006**, 87, 149	1.5	4
20	Evaluation of 18 satellite- and model-based soil moisture products using in situ measurements from 826 sensors		4
19	Satellite Monitoring of Global Surface Soil Organic Carbon Dynamics Using the SMAP Level 4 Carbon Product. *Journal of Geophysical Research G: Biogeosciences*, **2020**, 125, e2020JG006100	3.7	4
18	The benefit of brightness temperature assimilation for the SMAP Level-4 surface and root-zone soil moisture analysis. *Hydrology and Earth System Sciences*, **2021**, 25, 1569-1586	5.5	4
17	Global Soil Water Estimates as Landslide Predictor: The Effectiveness of SMOS, SMAP, and GRACE Observations, Land Surface Simulations, and Data Assimilation. *Journal of Hydrometeorology*, **2021**, 22, 1065-1084	3.7	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	The Impacts of Climate and Wildfire on Ecosystem Gross Primary Productivity in Alaska. *Journal of Geophysical Research G: Biogeosciences*, **2021**, 126, e2020JG006078	3.7	3
14	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
13	Improving Rain/No-Rain Detection Skill by Merging Precipitation Estimates from Different Sources. *Journal of Hydrometeorology*, **2020**, 21, 2419-2429	3.7	2

12	Data Assimilation of Terrestrial Water Storage Observations to Estimate Precipitation Fluxes: A Synthetic Experiment. *Remote Sensing*, **2021**, 13, 1223	5	2
11	Monitoring ecosystem-atmosphere co2 exchange respose to recent (20152016) climate variability using the smap l4 carbon product **2017**,		1
10	The impact of near-surface soil moisture assimilation at subseasonal, seasonal, and inter-annual time scales		1
9	The impact of land model structural, parameter, and forcing errors on the characterization of soil moisture uncertainty		1
8	Assimilation of SMAP Brightness Temperature Observations in the GEOS Land-Atmosphere Data Assimilation System. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **2021**, 14, 10628-10643	4.7	1
7	Tropical peatland hydrology simulated with a global land surface model		1
6	Skillful Seasonal Forecasts of Land Carbon Uptake in Northern Mid- and High Latitudes. *Geophysical Research Letters*, **2022**, 49,	4.9	1
5	DroughtCast: A Machine Learning Forecast of the United States Drought Monitor.. *Frontiers in Big Data*, **2021**, 4, 773478	2.8	1
4	Effect of Assimilating SMAP Soil Moisture on CO2 and CH4 Fluxes through Direct Insertion in a Land Surface Model. *Remote Sensing*, **2022**, 14, 2405	5	0
3	Evaluation of GEOS-Simulated L-Band Microwave Brightness Temperature Using Aquarius Observations over Non-Frozen Land across North America. *Remote Sensing*, **2020**, 12, 3098	5	
2	Estimating Terrestrial Snow Mass via Multi-Sensor Assimilation of Synthetic AMSR-E Brightness Temperature Spectral Differences and Synthetic GRACE Terrestrial Water Storage Retrievals. *Water Resources Research*, **2021**, 57, e2021WR029880	5.4	
1	Expanding the Application of Soil Moisture Monitoring Systems through Regression-Based Transformation. *Journal of Hydrometeorology*, **2021**, 22, 2601-2615	3.7	