Rolf H Reichle

List of Publications by Year
in descending order

159 papers	25,275 citations	67 h-index (13854)	151 g-index (7511)
179 all docs	179 docs citations	179 times ranked	17998 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	Hydrologic Data Assimilation with the Ensemble Kalman Filter. Monthly Weather Review, 2002, 130, 103-114.	0.5	785
5	Bias reduction in short records of satellite soil moisture. Geophysical Research Letters, 2004, 31, .	1.5	482
6	Data assimilation methods in the Earth sciences. Advances in Water Resources, 2008, 31, 1411-1418.	1.7	416
7	Assessment and Enhancement of MERRA Land Surface Hydrology Estimates. Journal of Climate, 2011, 24, 6322-6338.	1.2	409
8	Performance Metrics for Soil Moisture Retrievals and Application Requirements. Journal of Hydrometeorology, 2010, 11, 832-840.	0.7	391
9	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.	0.7	366
10	Extended versus Ensemble Kalman Filtering for Land Data Assimilation. Journal of Hydrometeorology, 2002, 3, 728-740.	0.7	317
11	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
12	Drought indicators based on modelâ€assimilated Gravity Recovery and Climate Experiment (GRACE) terrestrial water storage observations. Water Resources Research, 2012, 48, .	1.7	310
13	Global intercomparison of 12 land surface heat flux estimates. Journal of Geophysical Research, 2011, 116, .	3.3	309
14	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
15	Land Surface Precipitation in MERRA-2. Journal of Climate, 2017, 30, 1643-1664.	1.2	271
16	Assessment of MERRA-2 Land Surface Hydrology Estimates. Journal of Climate, 2017, 30, 2937-2960.	1.2	243
17	Skill in streamflow forecasts derived from large-scale estimates of soil moisture and snow. Nature Geoscience, 2010, 3, 613-616.	5.4	231
18	Assimilation of passive and active microwave soil moisture retrievals. Geophysical Research Letters, 2012, 39, .	1.5	211

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19	Skill and Global Trend Analysis of Soil Moisture from Reanalyses and Microwave Remote Sensing. Journal of Hydrometeorology, 2013, 14, 1259-1277.	0.7	205
20	An adaptive ensemble Kalman filter for soil moisture data assimilation. Water Resources Research, 2008, 44, .	1.7	204
21	Global assimilation of satellite surface soil moisture retrievals into the NASA Catchment land surface model. Geophysical Research Letters, 2005, 32, .	1.5	202
22	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
23	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
24	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
25	Downscaling of radio brightness measurements for soil moisture estimation: A four-dimensional variational data assimilation approach. Water Resources Research, 2001, 37, 2353-2364.	1.7	180
26	Snow depth variability in the Northern Hemisphere mountains observed from space. Nature Communications, 2019, 10, 4629.	5.8	180
27	Realistic Initialization of Land Surface States: Impacts on Subseasonal Forecast Skill. Journal of Hydrometeorology, 2004, 5, 1049-1063.	0.7	178
28	Role of Subsurface Physics in the Assimilation of Surface Soil Moisture Observations. Journal of Hydrometeorology, 2009, 10, 1534-1547.	0.7	178
29	Assimilation of Remotely Sensed Soil Moisture and Snow Depth Retrievals for Drought Estimation. Journal of Hydrometeorology, 2014, 15, 2446-2469.	0.7	167
30	Estimating root mean square errors in remotely sensed soil moisture over continental scale domains. Remote Sensing of Environment, 2013, 137, 288-298.	4.6	165
31	Validation practices for satellite soil moisture retrievals: What are (the) errors?. Remote Sensing of Environment, 2020, 244, 111806.	4.6	164
32	Satellite-Scale Snow Water Equivalent Assimilation into a High-Resolution Land Surface Model. Journal of Hydrometeorology, 2010, 11, 352-369.	0.7	160
33	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.	4.6	160
34	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.	1.9	156
35	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
36	An integrated hydrologic modeling and data assimilation framework. Computer, 2008, 41, 52-59.	1.2	150

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37	Multiscale assimilation of Advanced Microwave Scanning Radiometerâ€"EOS snow water equivalent and Moderate Resolution Imaging Spectroradiometer snow cover fraction observations in northern Colorado. Water Resources Research, 2012, 48, .	1.7	147
38	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.	0.7	145
39	A roadmap for high-resolution satellite soil moisture applications â€" confronting product characteristics with user requirements. Remote Sensing of Environment, 2021, 252, 112162.	4.6	138
40	Assimilation of Gridded GRACE Terrestrial Water Storage Estimates in the North American Land Data Assimilation System. Journal of Hydrometeorology, 2016, 17, 1951-1972.	0.7	137
41	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.	0.7	135
42	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
43	Variational data assimilation of microwave radiobrightness observations for land surface hydrology applications. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 1708-1718.	2.7	129
44	Assimilation of Satellite-Derived Skin Temperature Observations into Land Surface Models. Journal of Hydrometeorology, 2010, 11, 1103-1122.	0.7	128
45	A comparison of methods for a priori bias correction in soil moisture data assimilation. Water Resources Research, 2012, 48, .	1.7	126
46	Assessing the Impact of Horizontal Error Correlations in Background Fields on Soil Moisture Estimation. Journal of Hydrometeorology, 2003, 4, 1229-1242.	0.7	121
47	Correcting for forecast bias in soil moisture assimilation with the ensemble Kalman filter. Water Resources Research, 2007, 43, .	1.7	118
48	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.	1.7	115
49	Application of Triple Collocation in Ground-Based Validation of Soil Moisture Active/Passive (SMAP) Level 2 Data Products. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 489-502.	2.3	115
50	Soil Moisture, Snow, and Seasonal Streamflow Forecasts in the United States. Journal of Hydrometeorology, 2012, 13, 189-203.	0.7	113
51	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.	0.7	112
52	Joint Sentinelâ€1 and SMAP data assimilation to improve soil moisture estimates. Geophysical Research Letters, 2017, 44, 6145-6153.	1.5	111
53	Assimilation of SMOS brightness temperatures or soil moisture retrievals into a land surface model. Hydrology and Earth System Sciences, 2016, 20, 4895-4911.	1.9	105
54	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

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55	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
56	Benefits and pitfalls of GRACE data assimilation: A case study of terrestrial water storage depletion in India. Geophysical Research Letters, 2017, 44, 4107-4115.	1.5	102
57	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
58	Assimilation of gridded terrestrial water storage observations from GRACE into a land surface model. Water Resources Research, 2016, 52, 4164-4183.	1.7	100
59	Satellite and In Situ Observations for Advancing Global Earth Surface Modelling: A Review. Remote Sensing, 2018, 10, 2038.	1.8	95
60	Assimilation of terrestrial water storage from GRACE in a snowâ€dominated basin. Water Resources Research, 2012, 48, .	1.7	93
61	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, .	1.7	86
62	Estimating surface soil moisture from SMAP observations using a Neural Network technique. Remote Sensing of Environment, 2018, 204, 43-59.	4.6	85
63	Evaluation of MERRA Land Surface Estimates in Preparation for the Soil Moisture Active Passive Mission. Journal of Climate, 2011, 24, 3797-3816.	1.2	82
64	Contribution of soil moisture retrievals to land data assimilation products. Geophysical Research Letters, 2008, 35, .	1.5	79
65	L band microwave remote sensing and land data assimilation improve the representation of prestorm soil moisture conditions for hydrologic forecasting. Geophysical Research Letters, 2017, 44, 5495-5503.	1.5	76
66	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
67	Assessment of MERRA-2 Land Surface Energy Flux Estimates. Journal of Climate, 2018, 31, 671-691.	1.2	71
68	The SMAP Level 4 Carbon Product for Monitoring Ecosystem Landâ€“Atmosphere CO₂ Exchange. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 6517-6532.	2.7	69
69	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.	2.3	62
70	Exploiting Soil Moisture, Precipitation, and Streamflow Observations to Evaluate Soil Moisture/Runoff Coupling in Land Surface Models. Geophysical Research Letters, 2018, 45, 4869-4878.	1.5	56
71	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
72	Comparison of adaptive filtering techniques for land surface data assimilation. Water Resources Research, 2008, 44, .	1.7	55

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73	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.	2.1	54
74	Development of a hydrometeorological forcing data set for global soil moisture estimation. International Journal of Climatology, 2005, 25, 1697-1714.	1.5	51
75	Assimilation of global radar backscatter and radiometer brightness temperature observations to improve soil moisture and land evaporationÂestimates. Remote Sensing of Environment, 2017, 189, 194-210.	4.6	51
76	Assessing global surface water inundation dynamics using combined satellite information from SMAP, AMSR2 and Landsat. Remote Sensing of Environment, 2018, 213, 1-17.	4.6	51
77	Recent Amplified Global Gross Primary Productivity Due to Temperature Increase Is Offset by Reduced Productivity Due to Water Constraints. AGU Advances, 2020, 1, e2020AV000180.	2.3	50
78	Characterizing permafrost active layer dynamics and sensitivity to landscape spatial heterogeneity in Alaska. Cryosphere, 2018, 12, 145-161.	1.5	49
79	The Effect of Satellite Rainfall Error Modeling on Soil Moisture Prediction Uncertainty. Journal of Hydrometeorology, 2011, 12, 413-428.	0.7	45
80	An assessment of surface soil temperature products from numerical weather prediction models using groundâ€based measurements. Water Resources Research, 2012, 48, .	1.7	45
81	Merging active and passive microwave observations in soil moisture dataÂassimilation. Remote Sensing of Environment, 2017, 191, 117-130.	4.6	44
82	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.	4.6	43
83	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
84	New technologies require advances in hydrologic data assimilation. Eos, 2003, 84, 545.	0.1	41
85	Increased highâ€latitude photosynthetic carbon gain offset by respiration carbon loss during an anomalous warm winter to spring transition. Global Change Biology, 2020, 26, 682-696.	4.2	41
86	Dynamic Approaches for Snow Depth Retrieval From Spaceborne Microwave Brightness Temperature. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 1955-1967.	2.7	40
87	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
88	Using SMAP Level-4 soil moisture to constrain MOD16 evapotranspiration over the contiguous USA. Remote Sensing of Environment, 2021, 255, 112277.	4.6	40
89	Improved Hydrological Simulation Using SMAP Data: Relative Impacts of Model Calibration and Data Assimilation. Journal of Hydrometeorology, 2018, 19, 727-741.	0.7	38
90	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.	4.6	37

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91	Estimating Basinâ€Scale Water Budgets With SMAP Soil Moisture Data. Water Resources Research, 2018, 54, 4228-4244.	1.7	37
92	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.	4.6	36
93	Clarifications on the â€œComparison Between SMOS, VUA, ASCAT, and ECMWF Soil Moisture Products Over Four Watersheds in U.S.â€• IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 1901-1906.	2.7	35
94	Converting Between SMOS and SMAP Level-1 Brightness Temperature Observations Over Nonfrozen Land. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1908-1912.	1.4	34
95	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.	4.6	34
96	Consistency of Estimated Global Water Cycle Variations over the Satellite Era. Journal of Climate, 2014, 27, 6135-6154.	1.2	32
97	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.	2.3	32
98	Assimilation of MODIS Snow Cover Fraction Observations into the NASA Catchment Land Surface Model. Remote Sensing, 2018, 10, 316.	1.8	32
99	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.	1.5	31
100	Recent climate and fire disturbance impacts on boreal and arctic ecosystem productivity estimated using a satelliteâ€based terrestrial carbon flux model. Journal of Geophysical Research G: Biogeosciences, 2013, 118, 606-622.	1.3	30
101	Estimating Snow Mass in North America Through Assimilation of Advanced Microwave Scanning Radiometer Brightness Temperature Observations Using the Catchment Land Surface Model and Support Vector Machines. Water Resources Research, 2018, 54, 6488-6509.	1.7	30
102	Impact of Subsurface Temperature Variability on Surface Air Temperature Variability: An AGCM Study. Journal of Hydrometeorology, 2008, 9, 804-815.	0.7	28
103	Estimating Passive Microwave Brightness Temperature Over Snow-Covered Land in North America Using a Land Surface Model and an Artificial Neural Network. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 235-248.	2.7	27
104	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.	1.9	26
105	The impact of near-surface soil moisture assimilation at subseasonal, seasonal, and inter-annual timescales. Hydrology and Earth System Sciences, 2015, 19, 4831-4844.	1.9	25
106	Data Assimilation to Extract Soil Moisture Information from SMAP Observations. Remote Sensing, 2017, 9, 1179.	1.8	25
107	Diagnosing Bias in Modeled Soil Moisture/Runoff Coefficient Correlation Using the SMAP Level 4 Soil Moisture Product. Water Resources Research, 2019, 55, 7010-7026.	1.7	25
108	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

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109	Permafrost variability over the Northern Hemisphere based on the MERRA-2 reanalysis. Cryosphere, 2019, 13, 2087-2110.	1.5	21
110	Retrieving Clear-Sky Surface Skin Temperature for Numerical Weather Prediction Applications from Geostationary Satellite Data. Remote Sensing, 2013, 5, 342-366.	1.8	20
111	Spring hydrology determines summer net carbon uptake in northern ecosystems. Environmental Research Letters, 2014, 9, 064003.	2.2	20
112	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
113	The spatial scale of model errors and assimilated retrievals in a terrestrial water storage assimilation system. Water Resources Research, 2013, 49, 7457-7468.	1.7	19
114	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.	4.6	19
115	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.	0.7	18
116	Homogeneity of a global multisatellite soil moisture climate data record. Geophysical Research Letters, 2016, 43, 11,245.	1.5	18
117	Assimilation of Satellite Soil Moisture for Improved Atmospheric Reanalyses. Monthly Weather Review, 2019, 147, 2163-2188.	0.5	18
118	Below-surface water mediates the response of African forests to reduced rainfall. Environmental Research Letters, 2020, 15, 034063.	2.2	18
119	Global Satellite Retrievals of the Near-Surface Atmospheric Vapor Pressure Deficit from AMSR-E and AMSR2. Remote Sensing, 2018, 10, 1175.	1.8	17
120	Recent Advances in Land Data Assimilation at the NASA Global Modeling and Assimilation Office. , 2009, , 407-428.		17
121	Effective parameters in heterogeneous and homogeneous transport models with kinetic sorption. Water Resources Research, 1998, 34, 583-594.	1.7	16
122	Assimilation of Freezeâ€"Thaw Observations into the NASA Catchment Land Surface Model. Journal of Hydrometeorology, 2015, 16, 730-743.	0.7	16
123	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.	0.7	16
124	Soil Moisture Initialization Error and Subgrid Variability of Precipitation in Seasonal Streamflow Forecasting. Journal of Hydrometeorology, 2014, 15, 69-88.	0.7	15
125	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.	0.7	14
126	Uncertainty in soil moisture retrievals: An ensemble approach using SMOS L-band microwave data. Remote Sensing of Environment, 2019, 229, 133-147.	4.6	13

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127	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.	1.3	13
128	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.	1.9	12
129	The Impacts of Climate and Wildfire on Ecosystem Gross Primary Productivity in Alaska. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG006078.	1.3	12
130	Using enhanced GRACE water storage data to improve drought detection by the U.S. and North American Drought Monitors. , 2010, , .		10
131	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.	2.3	10
132	Consistency Between NASS Surveyed Soil Moisture Conditions and SMAP Soil Moisture Observations. Water Resources Research, 2019, 55, 7682-7693.	1.7	10
133	Data Assimilation of Terrestrial Water Storage Observations to Estimate Precipitation Fluxes: A Synthetic Experiment. Remote Sensing, 2021, 13, 1223.	1.8	10
134	DroughtCast: A Machine Learning Forecast of the United States Drought Monitor. Frontiers in Big Data, 2021, 4, 773478.	1.8	10
135	Crop-CASMA: A web geoprocessing and map service based architecture and implementation for serving soil moisture and crop vegetation condition data over U.S. Cropland. International Journal of Applied Earth Observation and Geoinformation, 2022, 112, 102902.	0.9	10
136	Improving Rain/No-Rain Detection Skill by Merging Precipitation Estimates from Different Sources. Journal of Hydrometeorology, 2020, 21, 2419-2429.	0.7	9
137	Tropical Peatland Hydrology Simulated With a Global Land Surface Model. Journal of Advances in Modeling Earth Systems, 2022, 14, .	1.3	9
138	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.	0.7	8
139	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
140	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
141	Improved Estimates of Pentad Precipitation Through the Merging of Independent Precipitation Data Sets. Water Resources Research, 2021, 57, .	1.7	8
142	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.	0.0	7
143	Length Scales of Hydrological Variability as Inferred from SMAP Soil Moisture Retrievals. Journal of Hydrometeorology, 2019, 20, 2129-2146.	0.7	6
144	The contributions of precipitation and soil moisture observations to the skill of soil moisture estimates in a land data assimilation system. Journal of Hydrometeorology, 0, , 110404091221083.	0.7	6

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145	Assimilation of SMAP Brightness Temperature Observations in the GEOS Landâ€“Atmosphere Data Assimilation System. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 10628-10643.	2.3	6
146	Effect of Assimilating SMAP Soil Moisture on CO2 and CH4 Fluxes through Direct Insertion in a Land Surface Model. Remote Sensing, 2022, 14, 2405.	1.8	6
147	Multiple spaceborne water cycle observations would aid modeling. Eos, 2006, 87, 149.	0.1	4
148	Using Observed Spatial Correlation Structures to Increase the Skill of Subseasonal Forecasts. Monthly Weather Review, 2008, 136, 1923-1930.	0.5	4
149	Crop-CASMA - A Web GIS Tool for Cropland Soil Moisture Monitoring and Assessment Based on SMAP Data. , 2021, , .		4
150	Soil Respiration Phenology Improves Modeled Phase of Terrestrial net Ecosystem Exchange in Northern Hemisphere. Journal of Advances in Modeling Earth Systems, 2022, 14, .	1.3	3
151	Evaluation of GEOS Precipitation Flagging for SMAP Soil Moisture Retrieval Accuracy. Journal of Hydrometeorology, 2021, , .	0.7	2
152	Estimating Terrestrial Snow Mass via Multiâ€Sensor Assimilation of Synthetic AMSRâ€E Brightness Temperature Spectral Differences and Synthetic GRACE Terrestrial Water Storage Retrievals. Water Resources Research, 2021, 57, e2021WR029880.	1.7	2
153	Skillful Seasonal Forecasts of Land Carbon Uptake in Northern Midâ€•and High Latitudes. Geophysical Research Letters, 2022, 49, .	1.5	2
154	Monitoring ecosystem-atmosphere co<inf>2</inf> exchange respose to recent (2015â€“2016) climate variability using the smap l4 carbon product. , 2017, , .		1
155	Large-Scale Hydrological Fluxes as Revealed by Data from the Soil Moisture Active-Passive Mission. , 2018, , .		0
156	Evaluation of GEOS-Simulated L-Band Microwave Brightness Temperature Using Aquarius Observations over Non-Frozen Land across North America. Remote Sensing, 2020, 12, 3098.	1.8	0
157	Expanding the Application of Soil Moisture Monitoring Systems through Regression-Based Transformation. Journal of Hydrometeorology, 2021, 22, 2601-2615.	0.7	0
158	Monitoring ECO-Hydrological Spring Onset Over Alaska and Northern Canada with Complementary Satellite Remote Sensing Data. , 2021, , .		0
159	Forward and Inverse L-Band Radiative Transfer Modeling over the Dry Chaco, Using SMOS Observations, Land Surface Modeling and in Situ Data. , 2021, , .		0