

Rolf H Reichle

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/245355/rolf-h-reichle-publications-by-year.pdf>

Version: 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Validation of Soil Moisture Data Products From the NASA SMAP Mission. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2022 , 15, 364-392	4.7	9
154	Skillful Seasonal Forecasts of Land Carbon Uptake in Northern Mid- and High Latitudes. <i>Geophysical Research Letters</i> , 2022 , 49,	4.9	1
153	Effect of Assimilating SMAP Soil Moisture on CO ₂ and CH ₄ Fluxes through Direct Insertion in a Land Surface Model. <i>Remote Sensing</i> , 2022 , 14, 2405	5	0
152	Assimilation of SMAP Brightness Temperature Observations in the GEOS Land-Atmosphere Data Assimilation System. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2021 , 14, 10628-10643	4.7	1
151	The benefit of brightness temperature assimilation for the SMAP Level-4 surface and root-zone soil moisture analysis. <i>Hydrology and Earth System Sciences</i> , 2021 , 25, 1569-1586	5.5	4
150	Global Soil Water Estimates as Landslide Predictor: The Effectiveness of SMOS, SMAP, and GRACE Observations, Land Surface Simulations, and Data Assimilation. <i>Journal of Hydrometeorology</i> , 2021 , 22, 1065-1084	3.7	4
149	The Impacts of Climate and Wildfire on Ecosystem Gross Primary Productivity in Alaska. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021 , 126, e2020JG006078	3.7	3
148	A roadmap for high-resolution satellite soil moisture applications confronting product characteristics with user requirements. <i>Remote Sensing of Environment</i> , 2021 , 252, 112162	13.2	38
147	Evaluation of 18 satellite- and model-based soil moisture products using in situ measurements from 826 sensors. <i>Hydrology and Earth System Sciences</i> , 2021 , 25, 17-40	5.5	61
146	Assimilation of SMAP and ASCAT soil moisture retrievals into the JULES land surface model using the Local Ensemble Transform Kalman Filter. <i>Remote Sensing of Environment</i> , 2021 , 253, 112222	13.2	14
145	The Contributions of Gauge-Based Precipitation and SMAP Brightness Temperature Observations to the Skill of the SMAP Level-4 Soil Moisture Product. <i>Journal of Hydrometeorology</i> , 2021 , 22, 405-424	3.7	6
144	Data Assimilation of Terrestrial Water Storage Observations to Estimate Precipitation Fluxes: A Synthetic Experiment. <i>Remote Sensing</i> , 2021 , 13, 1223	5	2
143	Using SMAP Level-4 soil moisture to constrain MOD16 evapotranspiration over the contiguous USA. <i>Remote Sensing of Environment</i> , 2021 , 255, 112277	13.2	12
142	Estimating Terrestrial Snow Mass via Multi-Sensor Assimilation of Synthetic AMSR-E Brightness Temperature Spectral Differences and Synthetic GRACE Terrestrial Water Storage Retrievals. <i>Water Resources Research</i> , 2021 , 57, e2021WR029880	5.4	
141	Expanding the Application of Soil Moisture Monitoring Systems through Regression-Based Transformation. <i>Journal of Hydrometeorology</i> , 2021 , 22, 2601-2615	3.7	
140	DroughtCast: A Machine Learning Forecast of the United States Drought Monitor.. <i>Frontiers in Big Data</i> , 2021 , 4, 773478	2.8	1
139	Validation practices for satellite soil moisture retrievals: What are (the) errors?. <i>Remote Sensing of Environment</i> , 2020 , 244, 111806	13.2	70

138	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. <i>Remote Sensing of Environment</i> , 2020 , 246, 111805	13.2	6
137	An Observation-Driven Approach to Improve Vegetation Phenology in a Global Land Surface Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2020 , 12, e2020MS002083	7.1	2
136	Below-surface water mediates the response of African forests to reduced rainfall. <i>Environmental Research Letters</i> , 2020 , 15, 034063	6.2	5
135	Improving Rain/No-Rain Detection Skill by Merging Precipitation Estimates from Different Sources. <i>Journal of Hydrometeorology</i> , 2020 , 21, 2419-2429	3.7	2
134	Satellite Monitoring of Global Surface Soil Organic Carbon Dynamics Using the SMAP Level 4 Carbon Product. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020 , 125, e2020JG006100	3.7	4
133	Evaluation of GEOS-Simulated L-Band Microwave Brightness Temperature Using Aquarius Observations over Non-Frozen Land across North America. <i>Remote Sensing</i> , 2020 , 12, 3098	5	
132	Synergistic use of SMAP and OCO-2 data in assessing the responses of ecosystem productivity to the 2018 U.S. drought. <i>Remote Sensing of Environment</i> , 2020 , 251, 112062	13.2	11
131	Recent Amplified Global Gross Primary Productivity Due to Temperature Increase Is Offset by Reduced Productivity Due to Water Constraints. <i>AGU Advances</i> , 2020 , 1, e2020AV000180	5.4	13
130	Increased high-latitude photosynthetic carbon gain offset by respiration carbon loss during an anomalous warm winter to spring transition. <i>Global Change Biology</i> , 2020 , 26, 682-696	11.4	19
129	Consistency Between NASS Surveyed Soil Moisture Conditions and SMAP Soil Moisture Observations. <i>Water Resources Research</i> , 2019 , 55, 7682-7693	5.4	5
128	Length Scales of Hydrological Variability as Inferred from SMAP Soil Moisture Retrievals. <i>Journal of Hydrometeorology</i> , 2019 , 20, 2129-2146	3.7	3
127	Uncertainty in Soil Moisture Retrievals: an Ensemble Approach using SMOS L-Band Microwave Data. <i>Remote Sensing of Environment</i> , 2019 , 229, 133-147	13.2	9
126	A Global Assessment of Added Value in the SMAP Level 4 Soil Moisture Product Relative to Its Baseline Land Surface Model. <i>Geophysical Research Letters</i> , 2019 , 46, 6604-6613	4.9	19
125	Assimilation of Satellite Soil Moisture for Improved Atmospheric Reanalyses. <i>Monthly Weather Review</i> , 2019 , 147, 2163-2188	2.4	11
124	Multi-sensor assimilation of SMOS brightness temperature and GRACE terrestrial water storage observations for soil moisture and shallow groundwater estimation. <i>Remote Sensing of Environment</i> , 2019 , 227, 12-27	13.2	23
123	Diagnosing Bias in Modeled Soil Moisture/Runoff Coefficient Correlation Using the SMAP Level 4 Soil Moisture Product. <i>Water Resources Research</i> , 2019 , 55, 7010-7026	5.4	13
122	PEAT-CLSM: A Specific Treatment of Peatland Hydrology in the NASA Catchment Land Surface Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2019 , 11, 2130-2162	7.1	15
121	Permafrost variability over the Northern Hemisphere based on the MERRA-2 reanalysis. <i>Cryosphere</i> , 2019 , 13, 2087-2110	5.5	14

120	Snow depth variability in the Northern Hemisphere mountains observed from space. <i>Nature Communications</i> , 2019 , 10, 4629	17.4	86
119	Version 4 of the SMAP Level-4 Soil Moisture Algorithm and Data Product. <i>Journal of Advances in Modeling Earth Systems</i> , 2019 , 11, 3106-3130	7.1	52
118	Improved Hydrological Simulation Using SMAP Data: Relative Impacts of Model Calibration and Data Assimilation. <i>Journal of Hydrometeorology</i> , 2018 , 19, 727-741	3.7	27
117	Assessment of MERRA-2 Land Surface Energy Flux Estimates. <i>Journal of Climate</i> , 2018 , 31, 671-691	4.4	48
116	Characterizing permafrost active layer dynamics and sensitivity to landscape spatial heterogeneity in Alaska. <i>Cryosphere</i> , 2018 , 12, 145-161	5.5	29
115	Assimilation of MODIS Snow Cover Fraction Observations into the NASA Catchment Land Surface Model. <i>Remote Sensing</i> , 2018 , 10, 316	5	24
114	Exploiting soil moisture, precipitation and streamflow observations to evaluate soil moisture/runoff coupling in land surface models. <i>Geophysical Research Letters</i> , 2018 , 45, 4869-4878	4.9	40
113	Assessing global surface water inundation dynamics using combined satellite information from SMAP, AMSR2 and Landsat. <i>Remote Sensing of Environment</i> , 2018 , 213, 1-17	13.2	39
112	Global Satellite Retrievals of the Near-Surface Atmospheric Vapor Pressure Deficit from AMSR-E and AMSR2. <i>Remote Sensing</i> , 2018 , 10,	5	9
111	Estimating surface soil moisture from SMAP observations using a Neural Network technique. <i>Remote Sensing of Environment</i> , 2018 , 204, 43-59	13.2	59
110	Spatial and temporal variability of root-zone soil moisture acquired from hydrologic modeling and AirMOSS P-band radar. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2018 , 11, 4578-4590	4.7	5
109	Satellite and In Situ Observations for Advancing Global Earth Surface Modelling: A Review. <i>Remote Sensing</i> , 2018 , 10, 2038	5	60
108	Global relationships among traditional reflectance vegetation indices (NDVI and NDII), evapotranspiration (ET), and soil moisture variability on weekly timescales. <i>Remote Sensing of Environment</i> , 2018 , 219, 339-352	13.2	53
107	Estimating snow mass in North America through assimilation of AMSR-E brightness temperature observations using the Catchment land surface model and support vector machines. <i>Water Resources Research</i> , 2018 , 54, 6488-6509	5.4	22
106	Estimating Basin-Scale Water Budgets with SMAP Soil Moisture Data. <i>Water Resources Research</i> , 2018 , 54, 4228-4244	5.4	22
105	. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2017 , 10, 489-502	4.7	93
104	Merging active and passive microwave observations in soil moisture data assimilation. <i>Remote Sensing of Environment</i> , 2017 , 191, 117-130	13.2	35
103	A Data-Driven Approach for Daily Real-Time Estimates and Forecasts of Near-Surface Soil Moisture. <i>Journal of Hydrometeorology</i> , 2017 , 18, 837-843	3.7	16

102	Benefits and Pitfalls of GRACE Data Assimilation: a Case Study of Terrestrial Water Storage Depletion in India. <i>Geophysical Research Letters</i> , 2017 , 44, 4107-4115	4.9	66
101	The Modern-Era Retrospective Analysis for Research and Applications, Version 2 (MERRA-2). <i>Journal of Climate</i> , 2017 , Volume 30, 5419-5454	4.4	2815
100	L-band microwave remote sensing and land data assimilation improve the representation of pre-storm soil moisture conditions for hydrologic forecasting. <i>Geophysical Research Letters</i> , 2017 , 44, 5495-5503	4.9	59
99	Joint Sentinel-1 and SMAP data assimilation to improve soil moisture estimates. <i>Geophysical Research Letters</i> , 2017 , 44, 6145-6153	4.9	75
98	Assessment of MERRA-2 Land Surface Hydrology Estimates. <i>Journal of Climate</i> , 2017 , 30, 2937-2960	4.4	159
97	Assimilation of global radar backscatter and radiometer brightness temperature observations to improve soil moisture and land evaporation estimates. <i>Remote Sensing of Environment</i> , 2017 , 189, 194-210	4.2	33
96	Global Assessment of the SMAP Level-4 Surface and Root-Zone Soil Moisture Product Using Assimilation Diagnostics. <i>Journal of Hydrometeorology</i> , 2017 , 18, 3217-3237	3.7	73
95	Assessment of the SMAP Level-4 Surface and Root-Zone Soil Moisture Product Using In Situ Measurements. <i>Journal of Hydrometeorology</i> , 2017 , 18, 2621-2645	3.7	139
94	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2017 , 55, 6517-6532	8.1	45
93	Evaluation and enhancement of permafrost modeling with the NASA Catchment Land Surface Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2017 , 9, 2771-2795	7.1	6
92	Land Surface Precipitation in MERRA-2. <i>Journal of Climate</i> , 2017 , 30, 1643-1664	4.4	195
91	Monitoring ecosystem-atmosphere co2 exchange response to recent (2015-2016) climate variability using the smap l4 carbon product 2017 ,		1
90	Data Assimilation to extract Soil Moisture Information from SMAP Observations. <i>Remote Sensing</i> , 2017 , 9, 1179	5	25
89	Homogeneity of a global multisatellite soil moisture climate data record. <i>Geophysical Research Letters</i> , 2016 , 43, 11,245	4.9	16
88	Assimilation of gridded terrestrial water storage observations from GRACE into a land surface model. <i>Water Resources Research</i> , 2016 , 52, 4164-4183	5.4	72
87	Global Assimilation of Multiangle and Multipolarization SMOS Brightness Temperature Observations into the GEOS-5 Catchment Land Surface Model for Soil Moisture Estimation. <i>Journal of Hydrometeorology</i> , 2016 , 17, 669-691	3.7	90
86	Assimilation of SMOS brightness temperatures or soil moisture retrievals into a land surface model. <i>Hydrology and Earth System Sciences</i> , 2016 , 20, 4895-4911	5.5	77
85	Assimilation of Gridded GRACE Terrestrial Water Storage Estimates in the North American Land Data Assimilation System. <i>Journal of Hydrometeorology</i> , 2016 , 17, 1951-1972	3.7	99

84	Assimilation of Freezer ³ haw Observations into the NASA Catchment Land Surface Model. <i>Journal of Hydrometeorology</i> , 2015 , 16, 730-743	3.7	13
83	The 2010 Russian drought impact on satellite measurements of solar-induced chlorophyll fluorescence: Insights from modeling and comparisons with parameters derived from satellite reflectances. <i>Remote Sensing of Environment</i> , 2015 , 166, 163-177	13.2	142
82	A Dynamic Approach to Addressing Observation-Minus-Forecast Bias in a Land Surface Skin Temperature Data Assimilation System. <i>Journal of Hydrometeorology</i> , 2015 , 16, 449-464	3.7	15
81	The impact of near-surface soil moisture assimilation at subseasonal, seasonal, and inter-annual timescales. <i>Hydrology and Earth System Sciences</i> , 2015 , 19, 4831-4844	5.5	20
80	Evaluating the utility of satellite soil moisture retrievals over irrigated areas and the ability of land data assimilation methods to correct for unmodeled processes. <i>Hydrology and Earth System Sciences</i> , 2015 , 19, 4463-4478	5.5	97
79	Converting Between SMOS and SMAP Level-1 Brightness Temperature Observations Over Nonfrozen Land. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2015 , 12, 1908-1912	4.1	30
78	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. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2015 , 8, 4431-4441	4.7	25
77	Uncertainty quantification of GEOS-5 L-band radiative transfer model parameters using Bayesian inference and SMOS observations. <i>Remote Sensing of Environment</i> , 2014 , 148, 146-157	13.2	30
76	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2014 , 52, 235-248	8.1	24
75	Clarifications on the Comparison Between SMOS, VUA, ASCAT, and ECMWF Soil Moisture Products Over Four Watersheds in U.S. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2014 , 52, 1901-1906	8.1	35
74	Global-scale comparison of passive (SMOS) and active (ASCAT) satellite based microwave soil moisture retrievals with soil moisture simulations (MERRA-Land). <i>Remote Sensing of Environment</i> , 2014 , 152, 614-626	13.2	135
73	Consistency of Estimated Global Water Cycle Variations over the Satellite Era. <i>Journal of Climate</i> , 2014 , 27, 6135-6154	4.4	27
72	Connecting Satellite Observations with Water Cycle Variables Through Land Data Assimilation: Examples Using the NASA GEOS-5 LDAS. <i>Surveys in Geophysics</i> , 2014 , 35, 577-606	7.6	49
71	Spring hydrology determines summer net carbon uptake in northern ecosystems. <i>Environmental Research Letters</i> , 2014 , 9, 064003	6.2	20
70	Soil Moisture Initialization Error and Subgrid Variability of Precipitation in Seasonal Streamflow Forecasting. <i>Journal of Hydrometeorology</i> , 2014 , 15, 69-88	3.7	13
69	Assimilation of Remotely Sensed Soil Moisture and Snow Depth Retrievals for Drought Estimation. <i>Journal of Hydrometeorology</i> , 2014 , 15, 2446-2469	3.7	127
68	An updated treatment of soil texture and associated hydraulic properties in a global land modeling system. <i>Journal of Advances in Modeling Earth Systems</i> , 2014 , 6, 957-979	7.1	77
67	Assimilation and downscaling of satellite observed soil moisture over the Little River Experimental Watershed in Georgia, USA. <i>Advances in Water Resources</i> , 2013 , 52, 19-33	4.7	91

66	Skill and Global Trend Analysis of Soil Moisture from Reanalyses and Microwave Remote Sensing. <i>Journal of Hydrometeorology</i> , 2013 , 14, 1259-1277	3.7	162
65	Estimating root mean square errors in remotely sensed soil moisture over continental scale domains. <i>Remote Sensing of Environment</i> , 2013 , 137, 288-298	13.2	126
64	Global Calibration of the GEOS-5 L-Band Microwave Radiative Transfer Model over Nonfrozen Land Using SMOS Observations. <i>Journal of Hydrometeorology</i> , 2013 , 14, 765-785	3.7	107
63	Connecting Satellite Observations with Water Cycle Variables Through Land Data Assimilation: Examples Using the NASA GEOS-5 LDAS. <i>Space Sciences Series of ISSI</i> , 2013 , 577-606	0.1	7
62	The Efficiency of Assimilating Satellite Soil Moisture Retrievals in a Land Data Assimilation System Using Different Rainfall Error Models. <i>Journal of Hydrometeorology</i> , 2013 , 14, 368-374	3.7	13
61	The spatial scale of model errors and assimilated retrievals in a terrestrial water storage assimilation system. <i>Water Resources Research</i> , 2013 , 49, 7457-7468	5.4	19
60	Recent climate and fire disturbance impacts on boreal and arctic ecosystem productivity estimated using a satellite-based terrestrial carbon flux model. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2013 , 118, 606-622	3.7	26
59	Retrieving Clear-Sky Surface Skin Temperature for Numerical Weather Prediction Applications from Geostationary Satellite Data. <i>Remote Sensing</i> , 2013 , 5, 342-366	5	16
58	Assimilation of GRACE terrestrial water storage into a land surface model: Evaluation and potential value for drought monitoring in western and central Europe. <i>Journal of Hydrology</i> , 2012 , 446-447, 103-115	6.5	126
57	A comparison of methods for a priori bias correction in soil moisture data assimilation. <i>Water Resources Research</i> , 2012 , 48,	5.4	100
56	Assimilation of passive and active microwave soil moisture retrievals. <i>Geophysical Research Letters</i> , 2012 , 39, n/a-n/a	4.9	179
55	An assessment of surface soil temperature products from numerical weather prediction models using ground-based measurements. <i>Water Resources Research</i> , 2012 , 48,	5.4	38
54	Multiscale assimilation of Advanced Microwave Scanning Radiometer/EOS snow water equivalent and Moderate Resolution Imaging Spectroradiometer snow cover fraction observations in northern Colorado. <i>Water Resources Research</i> , 2012 , 48,	5.4	125
53	Assimilation of terrestrial water storage from GRACE in a snow-dominated basin. <i>Water Resources Research</i> , 2012 , 48,	5.4	84
52	Drought indicators based on model-assimilated Gravity Recovery and Climate Experiment (GRACE) terrestrial water storage observations. <i>Water Resources Research</i> , 2012 , 48,	5.4	243
51	Assimilating remote sensing observations of leaf area index and soil moisture for wheat yield estimates: An observing system simulation experiment. <i>Water Resources Research</i> , 2012 , 48,	5.4	65
50	Soil Moisture, Snow, and Seasonal Streamflow Forecasts in the United States. <i>Journal of Hydrometeorology</i> , 2012 , 13, 189-203	3.7	105
49	The impact of model and rainfall forcing errors on characterizing soil moisture uncertainty in land surface modeling. <i>Hydrology and Earth System Sciences</i> , 2012 , 16, 3499-3515	5.5	23

48	The Impact of Rainfall Error Characterization on the Estimation of Soil Moisture Fields in a Land Data Assimilation System. <i>Journal of Hydrometeorology</i> , 2012 , 13, 1107-1118	3.7	8
47	Global intercomparison of 12 land surface heat flux estimates. <i>Journal of Geophysical Research</i> , 2011 , 116,		271
46	MERRA: NASA's Modern-Era Retrospective Analysis for Research and Applications. <i>Journal of Climate</i> , 2011 , 24, 3624-3648	4.4	3548
45	The Contributions of Precipitation and Soil Moisture Observations to the Skill of Soil Moisture Estimates in a Land Data Assimilation System. <i>Journal of Hydrometeorology</i> , 2011 , 12, 750-765	3.7	117
44	The Effect of Satellite Rainfall Error Modeling on Soil Moisture Prediction Uncertainty. <i>Journal of Hydrometeorology</i> , 2011 , 12, 413-428	3.7	38
43	Evaluation of MERRA Land Surface Estimates in Preparation for the Soil Moisture Active Passive Mission. <i>Journal of Climate</i> , 2011 , 24, 3797-3816	4.4	71
42	Assessment and Enhancement of MERRA Land Surface Hydrology Estimates. <i>Journal of Climate</i> , 2011 , 24, 6322-6338	4.4	365
41	Skill in streamflow forecasts derived from large-scale estimates of soil moisture and snow. <i>Nature Geoscience</i> , 2010 , 3, 613-616	18.3	195
40	Using enhanced GRACE water storage data to improve drought detection by the U.S. and North American Drought Monitors 2010 ,		7
39	Satellite-Scale Snow Water Equivalent Assimilation into a High-Resolution Land Surface Model. <i>Journal of Hydrometeorology</i> , 2010 , 11, 352-369	3.7	115
38	Assimilation of Satellite-Derived Skin Temperature Observations into Land Surface Models. <i>Journal of Hydrometeorology</i> , 2010 , 11, 1103-1122	3.7	109
37	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2010 , 48, 1955-1967	8.1	32
36	Performance Metrics for Soil Moisture Retrievals and Application Requirements. <i>Journal of Hydrometeorology</i> , 2010 , 11, 832-840	3.7	308
35	The Soil Moisture Active Passive (SMAP) Mission. <i>Proceedings of the IEEE</i> , 2010 , 98, 704-716	14.3	1845
34	Role of Subsurface Physics in the Assimilation of Surface Soil Moisture Observations. <i>Journal of Hydrometeorology</i> , 2009 , 10, 1534-1547	3.7	145
33	Recent Advances in Land Data Assimilation at the NASA Global Modeling and Assimilation Office 2009 , 407-428		16
32	An integrated hydrologic modeling and data assimilation framework. <i>Computer</i> , 2008 , 41, 52-59	1.6	112
31	Contribution of soil moisture retrievals to land data assimilation products. <i>Geophysical Research Letters</i> , 2008 , 35,	4.9	74

30	An adaptive ensemble Kalman filter for soil moisture data assimilation. <i>Water Resources Research</i> , 2008 , 44,	5.4	173
29	Comparison of adaptive filtering techniques for land surface data assimilation. <i>Water Resources Research</i> , 2008 , 44,	5.4	46
28	Assimilation of GRACE Terrestrial Water Storage Data into a Land Surface Model: Results for the Mississippi River Basin. <i>Journal of Hydrometeorology</i> , 2008 , 9, 535-548	3.7	301
27	Using Observed Spatial Correlation Structures to Increase the Skill of Subseasonal Forecasts. <i>Monthly Weather Review</i> , 2008 , 136, 1923-1930	2.4	4
26	Impact of Subsurface Temperature Variability on Surface Air Temperature Variability: An AGCM Study. <i>Journal of Hydrometeorology</i> , 2008 , 9, 804-815	3.7	25
25	Data assimilation methods in the Earth sciences. <i>Advances in Water Resources</i> , 2008 , 31, 1411-1418	4.7	338
24	A land surface data assimilation framework using the land information system: Description and applications. <i>Advances in Water Resources</i> , 2008 , 31, 1419-1432	4.7	156
23	The role of soil moisture initialization in subseasonal and seasonal streamflow prediction A case study in Sri Lanka. <i>Advances in Water Resources</i> , 2008 , 31, 1333-1343	4.7	32
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). <i>Journal of Geophysical Research</i> , 2007 , 112,		271
21	Correcting for forecast bias in soil moisture assimilation with the ensemble Kalman filter. <i>Water Resources Research</i> , 2007 , 43,	5.4	93
20	Multiple spaceborne water cycle observations would aid modeling. <i>Eos</i> , 2006 , 87, 149	1.5	4
19	Global assimilation of satellite surface soil moisture retrievals into the NASA Catchment land surface model. <i>Geophysical Research Letters</i> , 2005 , 32,	4.9	173
18	Relevance of time-varying and time-invariant retrieval error sources on the utility of spaceborne soil moisture products. <i>Geophysical Research Letters</i> , 2005 , 32,	4.9	46
17	Development of a hydrometeorological forcing data set for global soil moisture estimation. <i>International Journal of Climatology</i> , 2005 , 25, 1697-1714	3.5	47
16	Bias reduction in short records of satellite soil moisture. <i>Geophysical Research Letters</i> , 2004 , 31,	4.9	409
15	Global Soil Moisture from Satellite Observations, Land Surface Models, and Ground Data: Implications for Data Assimilation. <i>Journal of Hydrometeorology</i> , 2004 , 5, 430-442	3.7	246
14	Realistic Initialization of Land Surface States: Impacts on Subseasonal Forecast Skill. <i>Journal of Hydrometeorology</i> , 2004 , 5, 1049-1063	3.7	161
13	Assessing the Impact of Horizontal Error Correlations in Background Fields on Soil Moisture Estimation. <i>Journal of Hydrometeorology</i> , 2003 , 4, 1229-1242	3.7	112

12	New technologies require advances in hydrologic data assimilation. <i>Eos</i> , 2003 , 84, 545	1.5	35
11	Extended versus Ensemble Kalman Filtering for Land Data Assimilation. <i>Journal of Hydrometeorology</i> , 2002 , 3, 728-740	3.7	278
10	Hydrologic Data Assimilation with the Ensemble Kalman Filter. <i>Monthly Weather Review</i> , 2002 , 130, 103-114	1.4	669
9	Downscaling of radio brightness measurements for soil moisture estimation: A four-dimensional variational data assimilation approach. <i>Water Resources Research</i> , 2001 , 37, 2353-2364	5.4	149
8	Variational data assimilation of microwave radiobrightness observations for land surface hydrology applications. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2001 , 39, 1708-1718	8.1	112
7	Effective parameters in heterogeneous and homogeneous transport models with kinetic sorption. <i>Water Resources Research</i> , 1998 , 34, 583-594	5.4	14
6	The contributions of precipitation and soil moisture observations to the skill of soil moisture estimates in a land data assimilation system. <i>Journal of Hydrometeorology</i> , 110404091221083	3.7	6
5	Evaluation of 18 satellite- and model-based soil moisture products using in situ measurements from 826 sensors		4
4	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
3	The impact of near-surface soil moisture assimilation at subseasonal, seasonal, and inter-annual time scales		1
2	The impact of land model structural, parameter, and forcing errors on the characterization of soil moisture uncertainty		1
1	Tropical peatland hydrology simulated with a global land surface model		1