Wade Crow

List of Publications by Year
in descending order

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192	13,475	23567	24258
papers	citations	58 h-index	110 g-index

212	212	212	6633
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Soil Moisture Active Passive (SMAP) Mission. Proceedings of the IEEE, 2010, 98, 704-716.	21.3	2,546
2	Upscaling sparse groundâ€based soil moisture observations for the validation of coarseâ€resolution satellite soil moisture products. Reviews of Geophysics, 2012, 50, .	23.0	493
3	Assessment of the SMAP Passive Soil Moisture Product. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 4994-5007.	6.3	460
4	Performance Metrics for Soil Moisture Retrievals and Application Requirements. Journal of Hydrometeorology, 2010, 11, 832-840.	1.9	391
5	The assimilation of remotely sensed soil brightness temperature imagery into a land surface model using Ensemble Kalman filtering: a case study based on ESTAR measurements during SGP97. Advances in Water Resources, 2003, 26, 137-149.	3.8	329
6	Evaluating the Utility of Remotely Sensed Soil Moisture Retrievals for Operational Agricultural Drought Monitoring. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2010, 3, 57-66.	4.9	299
7	Development and assessment of the SMAP enhanced passive soil moisture product. Remote Sensing of Environment, 2018, 204, 931-941.	11.0	297
8	Triple Collocation-Based Merging of Satellite Soil Moisture Retrievals. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 6780-6792.	6.3	243
9	An adaptive ensemble Kalman filter for soil moisture data assimilation. Water Resources Research, 2008, 44, .	4.2	204
10	A new data assimilation approach for improving runoff prediction using remotely-sensed soil moisture retrievals. Hydrology and Earth System Sciences, 2009, 13, 1-16.	4.9	199
11	Assessment of the SMAP Level-4 Surface and Root-Zone Soil Moisture Product Using In Situ Measurements. Journal of Hydrometeorology, 2017, 18, 2621-2645.	1.9	196
12	A land surface data assimilation framework using the land information system: Description and applications. Advances in Water Resources, 2008, 31, 1419-1432.	3.8	182
13	Estimating Spatial Sampling Errors in Coarse-Scale Soil Moisture Estimates Derived from Point-Scale Observations. Journal of Hydrometeorology, 2010, 11, 1423-1429.	1.9	180
14	Role of Subsurface Physics in the Assimilation of Surface Soil Moisture Observations. Journal of Hydrometeorology, 2009, 10, 1534-1547.	1.9	178
15	The SMAP and Copernicus Sentinel 1A/B microwave active-passive high resolution surface soil moisture product. Remote Sensing of Environment, 2019, 233, 111380.	11.0	175
16	Improving hydrologic predictions of a catchment model via assimilation of surface soil moisture. Advances in Water Resources, 2011, 34, 526-536.	3.8	157
17	Global-scale evaluation of SMAP, SMOS and ASCAT soil moisture products using triple collocation. Remote Sensing of Environment, 2018, 214, 1-13.	11.0	157
18	Correcting Unintended Perturbation Biases in Hydrologic Data Assimilation. Journal of Hydrometeorology, 2009, 10, 734-750.	1.9	149

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19	A roadmap for high-resolution satellite soil moisture applications â€“ confronting product characteristics with user requirements. Remote Sensing of Environment, 2021, 252, 112162.	11.0	138
20	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.	1.9	135
21	Impact of Incorrect Model Error Assumptions on the Sequential Assimilation of Remotely Sensed Surface Soil Moisture. Journal of Hydrometeorology, 2006, 7, 421-432.	1.9	132
22	An intercomparison of available soil moisture estimates from thermal infrared and passive microwave remote sensing and land surface modeling. Journal of Geophysical Research, 2011, 116, .	3.3	123
23	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.	4.9	115
24	The Sensitivity of North American Terrestrial Carbon Fluxes to Spatial and Temporal Variation in Soil Moisture: An Analysis Using Radarâ€Derived Estimates of Rootâ€Zone Soil Moisture. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 3208-3231.	3.0	111
25	The Optimality of Potential Rescaling Approaches in Land Data Assimilation. Journal of Hydrometeorology, 2013, 14, 650-660.	1.9	110
26	Evaluation of Assumptions in Soil Moisture Triple Collocation Analysis. Journal of Hydrometeorology, 2014, 15, 1293-1302.	1.9	105
27	An improved approach for estimating observation and model error parameters in soil moisture data assimilation. Water Resources Research, 2010, 46, .	4.2	104
28	Version 4 of the SMAP Levelâ€4 Soil Moisture Algorithm and Data Product. Journal of Advances in Modeling Earth Systems, 2019, 11, 3106-3130.	3.8	104
29	Improving Satellite-Based Rainfall Accumulation Estimates Using Spaceborne Surface Soil Moisture Retrievals. Journal of Hydrometeorology, 2009, 10, 199-212.	1.9	102
30	A Review of the Applications of ASCAT Soil Moisture Products. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 2285-2306.	4.9	101
31	Global Assessment of the SMAP Level-4 Surface and Root-Zone Soil Moisture Product Using Assimilation Diagnostics. Journal of Hydrometeorology, 2017, 18, 3217-3237.	1.9	101
32	An assessment of the performance of global rainfall estimates without ground-based observations. Hydrology and Earth System Sciences, 2017, 21, 4347-4361.	4.9	99
33	Correcting rainfall using satelliteâ€based surface soil moisture retrievals: The Soil Moisture Analysis Rainfall Tool (SMART). Water Resources Research, 2011, 47, .	4.2	98
34	Improving operational flood ensemble prediction by the assimilation of satellite soil moisture: comparison between lumped and semi-distributed schemes. Hydrology and Earth System Sciences, 2015, 19, 1659-1676.	4.9	98
35	Beyond triple collocation: Applications to soil moisture monitoring. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6419-6439.	3.3	97
36	Improved prediction of quasiâ€global vegetation conditions using remotelyâ€sensed surface soil moisture. Geophysical Research Letters, 2012, 39, .	4.0	96

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37	An objective methodology for merging satelliteâ€•and modelâ€‘based soil moisture products. Water Resources Research, 2012, 48, .	4.2	93
38	Continental-Scale Evaluation of Remotely Sensed Soil Moisture Products. IEEE Geoscience and Remote Sensing Letters, 2007, 4, 451-455.	3.1	92
39	Upscaling of field-scale soil moisture measurements using distributed land surface modeling. Advances in Water Resources, 2005, 28, 1-14.	3.8	91
40	The added value of spaceborne passive microwave soil moisture retrievals for forecasting rainfall-runoff partitioning. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	87
41	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, .	4.2	86
42	A Quasi-Global Evaluation System for Satellite-Based Surface Soil Moisture Retrievals. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 2516-2527.	6.3	81
43	Estimating error crossâ€correlations in soil moisture data sets using extended collocation analysis. Journal of Geophysical Research D: Atmospheres, 2016, 121, 1208-1219.	3.3	80
44	Contribution of soil moisture retrievals to land data assimilation products. Geophysical Research Letters, 2008, 35, .	4.0	79
45	On the utility of land surface models for agricultural drought monitoring. Hydrology and Earth System Sciences, 2012, 16, 3451-3460.	4.9	76
46	Precipitation estimation using <scp>L</scp>â€band and <scp>C</scp>â€band soil moisture retrievals. Water Resources Research, 2016, 52, 7213-7225.	4.2	76
47	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.	4.0	76
48	The impact of land surface temperature on soil moisture anomaly detection from passive microwave observations. Hydrology and Earth System Sciences, 2011, 15, 3135-3151.	4.9	75
49	Comparison of microwave remote sensing and land surface modeling for surface soil moisture climatology estimation. Remote Sensing of Environment, 2020, 242, 111756.	11.0	73
50	Utility of Assimilating Surface Radiometric Temperature Observations for Evaporative Fraction and Heat Transfer Coefficient Retrieval. Boundary-Layer Meteorology, 2005, 115, 105-130.	2.3	71
51	Towards the estimation root-zone soil moisture via the simultaneous assimilation of thermal and microwave soil moisture retrievals. Advances in Water Resources, 2010, 33, 201-214.	3.8	71
52	The Value of Coarse-Scale Soil Moisture Observations for Regional Surface Energy Balance Modeling. Journal of Hydrometeorology, 2002, 3, 467-482.	1.9	69
53	Comparison of prognostic and diagnostic surface flux modeling approaches over the Nile River basin. Water Resources Research, 2014, 50, 386-408.	4.2	68
54	Validation and scaling of soil moisture in a semi-arid environment: SMAP validation experiment 2015 (SMAPVEX15). Remote Sensing of Environment, 2017, 196, 101-112.	11.0	65

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55	Intercomparison of Soil Moisture, Evaporative Stress, and Vegetation Indices for Estimating Corn and Soybean Yields Over the U.S.. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 1328-1343.	4.9	63
56	Using a Microwave Emission Model to Estimate Soil Moisture from ESTAR Observations during SGP99. Journal of Hydrometeorology, 2004, 5, 49-63.	1.9	62
57	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.	4.9	62
58	Multiobjective calibration of land surface model evapotranspiration predictions using streamflow observations and spaceborne surface radiometric temperature retrievals. Journal of Geophysical Research, 2003, 108, .	3.3	60
59	Correcting Land Surface Model Predictions for the Impact of Temporally Sparse Rainfall Rate Measurements Using an Ensemble Kalman Filter and Surface Brightness Temperature Observations. Journal of Hydrometeorology, 2003, 4, 960-973.	1.9	60
60	Diagnosing Neglected Soil Moisture Sourceâ€“Sink Processes via a Thermal Infraredâ€“Based Two-Source Energy Balance Model. Journal of Hydrometeorology, 2015, 16, 1070-1086.	1.9	60
61	The impact of vertical measurement depth on the information content of soil moisture times series data. Geophysical Research Letters, 2014, 41, 4997-5004.	4.0	59
62	Rainfall estimation by inverting SMOS soil moisture estimates: A comparison of different methods over Australia. Journal of Geophysical Research D: Atmospheres, 2016, 121, 12,062.	3.3	59
63	The SMAP mission combined active-passive soil moisture product at 9â€¯km and 3â€¯km spatial resolutions. Remote Sensing of Environment, 2018, 211, 204-217.	11.0	59
64	Exploiting Soil Moisture, Precipitation, and Streamflow Observations to Evaluate Soil Moisture/Runoff Coupling in Land Surface Models. Geophysical Research Letters, 2018, 45, 4869-4878.	4.0	56
65	Relevance of time-varying and time-invariant retrieval error sources on the utility of spaceborne soil moisture products. Geophysical Research Letters, 2005, 32, .	4.0	55
66	Comparison of adaptive filtering techniques for land surface data assimilation. Water Resources Research, 2008, 44, .	4.2	55
67	An ensemble Kalman filter dual assimilation of thermal infrared and microwave satellite observations of soil moisture into the Noah land surface model. Water Resources Research, 2012, 48, .	4.2	55
68	Dual Forcing and State Correction via Soil Moisture Assimilation for Improved Rainfallâ€“Runoff Modeling. Journal of Hydrometeorology, 2014, 15, 1832-1848.	1.9	55
69	Evaluating the Operational Application of SMAP for Global Agricultural Drought Monitoring. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2019, 12, 3387-3397.	4.9	52
70	Multi-scale dynamics of soil moisture variability observed during SGP'97. Geophysical Research Letters, 1999, 26, 3485-3488.	4.0	51
71	A Novel Method for Quantifying Value in Spaceborne Soil Moisture Retrievals. Journal of Hydrometeorology, 2007, 8, 56-67.	1.9	51
72	Dual assimilation of satellite soil moisture to improve streamflow prediction in dataâ€scarce catchments. Water Resources Research, 2016, 52, 5357-5375.	4.2	49

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73	Role of Passive Microwave Remote Sensing in Improving Flood Forecasts. IEEE Geoscience and Remote Sensing Letters, 2009, 6, 112-116.	3.1	47
74	Validation of SMAP soil moisture for the SMAPVEX15 field campaign using a hyperâ€resolution model. Water Resources Research, 2017, 53, 3013-3028.	4.2	47
75	Evaluation of Satellite-Based Precipitation Products from IMERG V04A and V03D, CMORPH and TMPA with Gauged Rainfall in Three Climatologic Zones in China. Remote Sensing, 2018, 10, 30.	4.0	47
76	The Impact of Vertical Measurement Depth on the Information Content of Soil Moisture for Latent Heat Flux Estimation. Journal of Hydrometeorology, 2016, 17, 2419-2430.	1.9	46
77	Data assimilation of high-resolution thermal and radar remote sensing retrievals for soil moisture monitoring in a drip-irrigated vineyard. Remote Sensing of Environment, 2020, 239, 111622.	11.0	46
78	Comparison of high-resolution airborne soil moisture retrievals to SMAP soil moisture during the SMAP validation experiment 2016 (SMAPVEX16). Remote Sensing of Environment, 2019, 227, 137-150.	11.0	45
79	Benchmarking a Soil Moisture Data Assimilation System for Agricultural Drought Monitoring. Journal of Hydrometeorology, 2014, 15, 1117-1134.	1.9	44
80	An integrated error parameter estimation and lag-aware data assimilation scheme for real-time flood forecasting. Journal of Hydrology, 2014, 519, 2722-2736.	5.4	42
81	The Impact of Local Acquisition Time on the Accuracy of Microwave Surface Soil Moisture Retrievals over the Contiguous United States. Remote Sensing, 2015, 7, 13448-13465.	4.0	40
82	Impact of Tile Drainage on Evapotranspiration in South Dakota, USA, Based on High Spatiotemporal Resolution Evapotranspiration Time Series From a Multisatellite Data Fusion System. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 2550-2564.	4.9	40
83	Correcting satellite-based precipitation products through SMOS soil moisture data assimilation in two land-surface models of different complexity: API and SURFEX. Remote Sensing of Environment, 2017, 200, 295-310.	11.0	39
84	The Auto-Tuned Land Data Assimilation System (ATLAS). Water Resources Research, 2014, 50, 371-385.	4.2	38
85	Agricultural Drought Monitoring via the Assimilation of SMAP Soil Moisture Retrievals Into a Global Soil Water Balance Model. Frontiers in Big Data, 2020, 3, 10.	2.9	38
86	Triple collocation: Beyond three estimates and separation of structural/non-structural errors. Remote Sensing of Environment, 2015, 171, 299-310.	11.0	37
87	The Error Structure of the SMAP Single and Dual Channel Soil Moisture Retrievals. Geophysical Research Letters, 2018, 45, 758-765.	4.0	37
88	Comprehensive Evaluation of GPM-IMERG, CMORPH, and TMPA Precipitation Products with Gauged Rainfall over Mainland China. Advances in Meteorology, 2018, 2018, 1-18.	1.6	37
89	Estimating Basinâ€Scale Water Budgets With SMAP Soil Moisture Data. Water Resources Research, 2018, 54, 4228-4244.	4.2	37
90	Robust estimates of soil moisture and latent heat flux coupling strength obtained from triple collocation. Geophysical Research Letters, 2015, 42, 8415-8423.	4.0	36

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91	A double instrumental variable method for geophysical product error estimation. Remote Sensing of Environment, 2019, 225, 217-228.	11.0	36
92	Estimating precipitation errors using spaceborne surface soil moisture retrievals. Geophysical Research Letters, 2007, 34, .	4.0	35
93	Microwave implementation of two-source energy balance approach for estimating evapotranspiration. Hydrology and Earth System Sciences, 2018, 22, 1351-1369.	4.9	35
94	Global Investigation of Soil Moisture and Latent Heat Flux Coupling Strength. Water Resources Research, 2018, 54, 8196-8215.	4.2	34
95	Multi-decadal analysis of root-zone soil moisture applying the exponential filter across CONUS. Hydrology and Earth System Sciences, 2017, 21, 4403-4417.	4.9	33
96	Stand-alone error characterisation of microwave satellite soil moisture using a Fourier method. Remote Sensing of Environment, 2014, 154, 115-126.	11.0	32
97	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.	4.0	31
98	The Added Value of Assimilating Remotely Sensed Soil Moisture for Estimating Summertime Soil Moistureâ€Air Temperature Coupling Strength. Water Resources Research, 2018, 54, 6072-6084.	4.2	28
99	Effect of vegetation index choice on soil moisture retrievals via the synergistic use of synthetic aperture radar and optical remote sensing. International Journal of Applied Earth Observation and Geoinformation, 2019, 80, 47-57.	2.8	28
100	Quasi-global machine learning-based soil moisture estimates at high spatio-temporal scales using CYGNSS and SMAP observations. Remote Sensing of Environment, 2022, 276, 113041.	11.0	28
101	Intercomparison of Spatially Distributed Models for Predicting Surface Energy Flux Patterns during SMACEX. Journal of Hydrometeorology, 2005, 6, 941-953.	1.9	27
102	The potential of 2D Kalman filtering for soil moisture data assimilation. Remote Sensing of Environment, 2015, 171, 137-148.	11.0	27
103	The Efficiency of Data Assimilation. Water Resources Research, 2018, 54, 6374-6392.	4.2	27
104	Global Estimates of Land Surface Water Fluxes from SMOS and SMAP Satellite Soil Moisture Data. Journal of Hydrometeorology, 2020, 21, 241-253.	1.9	27
105	Soil Evaporation Stress Determines Soil Moistureâ€Evapotranspiration Coupling Strength in Land Surface Modeling. Geophysical Research Letters, 2020, 47, e2020GL090391.	4.0	27
106	A Monte Carlo based adaptive Kalman filtering framework for soil moisture data assimilation. Remote Sensing of Environment, 2019, 228, 105-114.	11.0	26
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.	4.2	25
108	Land transpiration-evaporation partitioning errors responsible for modeled summertime warm bias in the central United States. Nature Communications, 2022, 13, 336.	12.8	25

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109	On the Use of a Water Balance to Evaluate Interannual Terrestrial ET Variability. Journal of Hydrometeorology, 2015, 16, 1102-1108.	1.9	24
110	Cloud tolerance of remote-sensing technologies to measure land surface temperature. Hydrology and Earth System Sciences, 2016, 20, 3263-3275.	4.9	24
111	An Improved Triple Collocation Analysis Algorithm for Decomposing Autocorrelated and White Soil Moisture Retrieval Errors. Journal of Geophysical Research D: Atmospheres, 2017, 122, 13,081.	3.3	24
112	Uncertainty of Reference Pixel Soil Moisture Averages Sampled at SMAP Core Validation Sites. Journal of Hydrometeorology, 2019, 20, 1553-1569.	1.9	24
113	Retrieving global surface soil moisture from GRACE satellite gravity data. Journal of Hydrology, 2020, 584, 124717.	5.4	24
114	Impact of Soil Moisture Aggregation on Surface Energy Flux Prediction During SGP'97. Geophysical Research Letters, 2002, 29, 8-1.	4.0	23
115	Information loss in approximately Bayesian estimation techniques: A comparison of generative and discriminative approaches to estimating agricultural productivity. Journal of Hydrology, 2013, 507, 163-173.	5.4	23
116	Spatial patterns in timing of the diurnal temperature cycle. Hydrology and Earth System Sciences, 2013, 17, 3695-3706.	4.9	23
117	Optimal averaging of soil moisture predictions from ensemble land surface model simulations. Water Resources Research, 2015, 51, 9273-9289.	4.2	23
118	Assimilation of Spatially Sparse In Situ Soil Moisture Networks into a Continuous Model Domain. Water Resources Research, 2018, 54, 1353-1367.	4.2	23
119	Validation of a New Root-Zone Soil Moisture Product: Soil MERGE. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2019, 12, 3351-3365.	4.9	23
120	Assessment of SMOS and SMAP soil moisture products against new estimates combining physical model, a statistical model, and in-situ observations: A case study over the Huai River Basin, China. Journal of Hydrology, 2021, 598, 126468.	5.4	23
121	Enhancing modelâ€based land surface temperature estimates using multiplatform microwave observations. Journal of Geophysical Research D: Atmospheres, 2013, 118, 577-591.	3.3	22
122	Operational hydrological forecasting during the IPHEx-IOP campaign â€“ Meet the challenge. Journal of Hydrology, 2016, 541, 434-456.	5.4	22
123	Error decomposition of nine passive and active microwave satellite soil moisture data sets over Australia. Remote Sensing of Environment, 2016, 182, 128-140.	11.0	22
124	Estimating annual water storage variations in medium-scale (2000â€“10â€¯000â€¯km²) basins using microwave-based soil moisture retrievals. Hydrology and Earth System Sciences, 2017, 21, 1849-1862.	4.9	21
125	Assessment of the impact of spatial heterogeneity on microwave satellite soil moisture periodic error. Remote Sensing of Environment, 2018, 205, 85-99.	11.0	21
126	Soil Moistureâ€“Evapotranspiration Overcoupling and L-Band Brightness Temperature Assimilation: Sources and Forecast Implications. Journal of Hydrometeorology, 2020, 21, 2359-2374.	1.9	21

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127	Improving Spaceborne Radiometer Soil Moisture Retrievals With Alternative Aggregation Rules for Ancillary Parameters in Highly Heterogeneous Vegetated Areas. IEEE Geoscience and Remote Sensing Letters, 2008, 5, 261-265.	3.1	20
128	The Impact of Radar Incidence Angle on Soil-Moisture-Retrieval Skill. IEEE Geoscience and Remote Sensing Letters, 2010, 7, 501-505.	3.1	20
129	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.	1.9	20
130	Improving long-term, retrospective precipitation datasets using satellite-based surface soil moisture retrievals and the Soil Moisture Analysis Rainfall Tool. Journal of Applied Remote Sensing, 2012, 6, 063604.	1.3	19
131	Improving Spatial Patterns Prior to Land Surface Data Assimilation via Model Calibration Using SMAP Surface Soil Moisture Data. Water Resources Research, 2020, 56, e2020WR027770.	4.2	19
132	A Framework for Diagnosing Factors Degrading the Streamflow Performance of a Soil Moisture Data Assimilation System. Journal of Hydrometeorology, 2019, 20, 79-97.	1.9	18
133	A Quasi-Global Approach to Improve Day-Time Satellite Surface Soil Moisture Anomalies through the Land Surface Temperature Input. Climate, 2016, 4, 50.	2.8	17
134	Recent Advances in Land Data Assimilation at the NASA Global Modeling and Assimilation Office. , 2009, , 407-428.		17
135	An approach to quantifying the efficiency of a Bayesian filter. Water Resources Research, 2013, 49, 2164-2173.	4.2	16
136	Assimilation of Satellite Soil Moisture Products for River Flow Prediction: An Extensive Experiment in Over 700 Catchments Throughout Europe. Water Resources Research, 2021, 57, e2021WR029643.	4.2	16
137	Multiâ€Profile Analysis of Soil Moisture within the US Climate Reference Network. Vadose Zone Journal, 2016, 15, 1-8.	2.2	15
138	Use of Satellite Soil Moisture to Diagnose Climate Model Representations of European Soil Moistureâ€Air Temperature Coupling Strength. Geophysical Research Letters, 2018, 45, 12,884.	4.0	15
139	Enhanced Large-Scale Validation of Satellite-Based Land Rainfall Products. Journal of Hydrometeorology, 2021, 22, 245-257.	1.9	15
140	A triple collocation-based 2D soil moisture merging methodology considering spatial and temporal non-stationary errors. Remote Sensing of Environment, 2021, 263, 112509.	11.0	15
141	Can Surface Soil Moisture Information Identify Evapotranspiration Regime Transitions?. Geophysical Research Letters, 2022, 49, .	4.0	15
142	L-band remote-sensing increases sampled levels of global soil moisture-air temperature coupling strength. Remote Sensing of Environment, 2019, 220, 51-58.	11.0	14
143	Improving Streamflow Prediction Using Remotely-Sensed Soil Moisture and Snow Depth. Remote Sensing, 2016, 8, 503.	4.0	13
144	Impact of Rescaling Approaches in Simple Fusion of Soil Moisture Products. Water Resources Research, 2019, 55, 7804-7825.	4.2	12

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145	Dual state/rainfall correction via soil moisture assimilation for improved streamflow simulation: evaluation of a large-scale implementation with Soil Moisture Active Passive (SMAP) satellite data. Hydrology and Earth System Sciences, 2020, 24, 615-631.	4.9	12
146	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.	4.9	12
147	Estimating Corn Canopy Water Content From Normalized Difference Water Index (NDWI): An Optimized NDWI-Based Scheme and Its Feasibility for Retrieving Corn VWC. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 8168-8181.	6.3	12
148	Improving root-zone soil moisture estimations using dynamic root growth and crop phenology. Advances in Water Resources, 2015, 86, 170-183.	3.8	11
149	A Unified Dataâ€Driven Method to Derive Hydrologic Dynamics From Global SMAP Surface Soil Moisture and GPM Precipitation Data. Water Resources Research, 2020, 56, e2019WR024949.	4.2	11
150	Model representation of the coupling between evapotranspiration and soil water content at different depths. Hydrology and Earth System Sciences, 2020, 24, 581-594.	4.9	11
151	US national cropland soil moisture monitoring using SMAP. , 2013, , .		10
152	Impact of Model Relative Accuracy in Framework of Rescaling Observations in Hydrological Data Assimilation Studies. Journal of Hydrometeorology, 2016, 17, 2245-2257.	1.9	10
153	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.	4.9	10
154	Consistency Between NASS Surveyed Soil Moisture Conditions and SMAP Soil Moisture Observations. Water Resources Research, 2019, 55, 7682-7693.	4.2	10
155	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.	1.9	10
156	The Impact of Assumed Error Variances on Surface Soil Moisture and Snow Depth Hydrologic Data Assimilation. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 5116-5129.	4.9	9
157	Nonparametric triple collocation. Water Resources Research, 2017, 53, 5516-5530.	4.2	9
158	Improving Rain/No-Rain Detection Skill by Merging Precipitation Estimates from Different Sources. Journal of Hydrometeorology, 2020, 21, 2419-2429.	1.9	9
159	Investigating the Efficacy of the SMAP Downscaled Soil Moisture Product for Drought Monitoring Based on Information Theory. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 1604-1616.	4.9	9
160	Applying a Wavelet Transform Technique to Optimize General Fitting Models for SM Analysis: A Case Study in Downscaling over the Qinghaiâ€“Tibet Plateau. Remote Sensing, 2022, 14, 3063.	4.0	9
161	SMAP DATA for cropland soil moisture assessment â€” A case study. , 2017, , .		8
162	Impact of Temporal Autocorrelation Mismatch on the Assimilation of Satellite-Derived Surface Soil Moisture Retrievals. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 3534-3542.	4.9	7

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