Brian D Wardlow

List of Publications by Year
in descending order

79 papers	7,318 citations	81839 39 h-index	82499 72 g-index
80 all docs	80 docs citations	80 times ranked	7290 citing authors

#	Article	IF	Citations
1	Analysis of time-series MODIS 250Âm vegetation index data for crop classification in the U.S. Central Great Plains. Remote Sensing of Environment, 2007, 108, 290-310.	4.6	690
2	Remote sensing of drought: Progress, challenges and opportunities. Reviews of Geophysics, 2015, 53, 452-480.	9.0	605
3	Large-area crop mapping using time-series MODIS 250Âm NDVI data: An assessment for the U.S. Central Great Plains. Remote Sensing of Environment, 2008, 112, 1096-1116.	4.6	598
4	A five-year analysis of MODIS NDVI and NDWI for grassland drought assessment over the central Great Plains of the United States. Geophysical Research Letters, 2007, 34, .	1.5	413
5	Evaluation of Drought Indices Based on Thermal Remote Sensing of Evapotranspiration over the Continental United States. Journal of Climate, 2011, 24, 2025-2044.	1.2	391
6	The Vegetation Drought Response Index (VegDRI): A New Integrated Approach for Monitoring Drought Stress in Vegetation. GIScience and Remote Sensing, 2008, 45, 16-46.	2.4	363
7	A review of vegetation phenological metrics extraction using time-series, multispectral satellite data. Remote Sensing of Environment, 2020, 237, 111511.	4.6	358
8	A high-performance and in-season classification system of field-level crop types using time-series Landsat data and a machine learning approach. Remote Sensing of Environment, 2018, 210, 35-47.	4.6	324
9	A Two-Step Filtering approach for detecting maize and soybean phenology with time-series MODIS data. Remote Sensing of Environment, 2010, 114, 2146-2159.	4.6	241
10	Assessing the evolution of soil moisture and vegetation conditions during the 2012 United States flash drought. Agricultural and Forest Meteorology, 2016, 218-219, 230-242.	1.9	228
11	Evaluation of MODIS NDVI and NDWI for vegetation drought monitoring using Oklahoma Mesonet soil moisture data. Geophysical Research Letters, 2008, 35, .	1.5	206
12	An Intercomparison of Drought Indicators Based on Thermal Remote Sensing and NLDAS-2 Simulations with U.S. Drought Monitor Classifications. Journal of Hydrometeorology, 2013, 14, 1035-1056.	0.7	194
13	Use of remote sensing indicators to assess effects of drought and human-induced land degradation on ecosystem health in Northeastern Brazil. Remote Sensing of Environment, 2018, 213, 129-143.	4.6	150
14	Urban drought challenge to 2030 sustainable development goals. Science of the Total Environment, 2019, 693, 133536.	3.9	147
15	An alternative method using digital cameras for continuous monitoring of crop status. Agricultural and Forest Meteorology, 2012, 154-155, 113-126.	1.9	135
16	Using USDA Crop Progress Data for the Evaluation of Greenup Onset Date Calculated from MODIS 250-Meter Data. Photogrammetric Engineering and Remote Sensing, 2006, 72, 1225-1234.	0.3	130
17	Remotely sensed high resolution irrigated area mapping in India for 2000 to 2015. Scientific Data, 2016, 3, 160118.	2.4	124
18	Evaluating satellite-derived long-term historical precipitation datasets for drought monitoring in Chile. Atmospheric Research, 2017, 186, 26-42.	1.8	119

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19	A comparison of MODIS 250-m EVI and NDVI data for crop mapping: a case study for southwest Kansas. International Journal of Remote Sensing, 2010, 31, 805-830.	1.3	118
20	A hybrid approach for detecting corn and soybean phenology with time-series MODIS data. Remote Sensing of Environment, 2016, 181, 237-250.	4.6	102
21	Monitoring the effects of rapid onset of drought on non-irrigated maize with agronomic data and climate-based drought indices. Agricultural and Forest Meteorology, 2014, 191, 1-11.	1.9	83
22	Effects of drought on avian community structure. Global Change Biology, 2010, 16, 2158-2170.	4.2	81
23	Field-scale mapping of evaporative stress indicators of crop yield: An application over Mead, NE, USA. Remote Sensing of Environment, 2018, 210, 387-402.	4.6	75
24	Estimation of Daily Air Temperature Based on MODIS Land Surface Temperature Products over the Corn Belt in the US. Remote Sensing, 2015, 7, 951-970.	1.8	72
25	Consequences of climate change for the soil climate in Central Europe and the central plains of the United States. Climatic Change, 2013, 120, 405-418.	1.7	69
26	Quantifying irrigation cooling benefits to maize yield in the US Midwest. Global Change Biology, 2020, 26, 3065-3078.	4.2	68
27	Facilitating the Use of Drought Early Warning Information through Interactions with Agricultural Stakeholders. Bulletin of the American Meteorological Society, 2015, 96, 1073-1078.	1.7	64
28	Multitemporal, Moderate-Spatial-Resolution Remote Sensing of Modern Agricultural Production and Land Modification in the Brazilian Amazon. GIScience and Remote Sensing, 2007, 44, 117-148.	2.4	63
29	Soil moisture trends in the Czech Republic between 1961 and 2012. International Journal of Climatology, 2015, 35, 3733-3747.	1.5	61
30	An evaluation of MODIS 250â€m data for green LAI estimation in crops. Geophysical Research Letters, 2007, 34, .	1.5	58
31	Combined effects of heat waves and droughts on avian communities across the conterminous United States. Ecosphere, 2010, 1, 1-22.	1.0	57
32	The need for integration of drought monitoring tools for proactive food security management in subâ€Saharan Africa. Natural Resources Forum, 2008, 32, 265-279.	1.8	53
33	Assessment of Vegetation Response to Drought in Nebraska Using Terra-MODIS Land Surface Temperature and Normalized Difference Vegetation Index. GIScience and Remote Sensing, 2011, 48, 432-455.	2.4	49
34	Estimating daily gross primary production of maize based only on MODIS WDRVI and shortwave radiation data. Remote Sensing of Environment, 2011, 115, 3091-3101.	4.6	48
35	Developing a Remotely Sensed Drought Monitoring Indicator for Morocco. Geosciences (Switzerland), 2018, 8, 55.	1.0	45
36	Developing a Remote Sensing-Based Combined Drought Indicator Approach for Agricultural Drought Monitoring over Marathwada, India. Remote Sensing, 2020, 12, 2091.	1.8	45

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37	Detecting Spatiotemporal Changes of Corn Developmental Stages in the U.S. Corn Belt Using MODIS WDRVI Data. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 1926-1936.	2.7	44
38	Assessing the Vegetation Condition Impacts of the 2011 Drought across the U.S. Southern Great Plains Using the Vegetation Drought Response Index (VegDRI). Journal of Applied Meteorology and Climatology, 2015, 54, 153-169.	0.6	43
39	The Vegetation Outlook (VegOut): A New Method for Predicting Vegetation Seasonal Greenness. GIScience and Remote Sensing, 2010, 47, 25-52.	2.4	40
40	Developing a satellite-based combined drought indicator to monitor agricultural drought: a case study for Ethiopia. GIScience and Remote Sensing, 2019, 56, 718-748.	2.4	39
41	Building the vegetation drought response index for Canada (VegDRI-Canada) to monitor agricultural drought: first results. GIScience and Remote Sensing, 2017, 54, 230-257.	2.4	37
42	Priority questions in multidisciplinary drought research. Climate Research, 2018, 75, 241-260.	0.4	35
43	Mapping the Spatial-Temporal Dynamics of Vegetation Response Lag to Drought in a Semi-Arid Region. Remote Sensing, 2019, 11, 1873.	1.8	33
44	Application of day and night digital photographs for estimating maize biophysical characteristics. Precision Agriculture, 2012, 13, 285-301.	3.1	32
45	A Comparative Analysis of Phenological Curves for Major Crops in Kansas. GIScience and Remote Sensing, 2010, 47, 241-259.	2.4	31
46	Agricultural Drought Assessment in East Asia Using Satellite-Based Indices. Remote Sensing, 2020, 12, 444.	1.8	31
47	A State-Level Comparative Analysis of the GAP and NLCD Land-Cover Data Sets. Photogrammetric Engineering and Remote Sensing, 2003, 69, 1387-1397.	0.3	30
48	The role of topography, soil, and remotely sensed vegetation condition towards predicting crop yield. Field Crops Research, 2020, 252, 107788.	2.3	30
49	A multi-scale accuracy assessment of the MODIS irrigated agriculture data-set (MIrAD) for the state of Nebraska, USA. GIScience and Remote Sensing, 2014, 51, 575-592.	2.4	21
50	Developing the vegetation drought response index for South Korea (VegDRI-SKorea) to assess the vegetation condition during drought events. International Journal of Remote Sensing, 2018, 39, 1548-1574.	1.3	21
51	Connections between the hydrological cycle and crop yield in the rainfed U.S. Corn Belt. Journal of Hydrology, 2020, 590, 125398.	2.3	21
52	Mapping sub-field maize yields in Nebraska, USA by combining remote sensing imagery, crop simulation models, and machine learning. Precision Agriculture, 2020, 21, 678-694.	3.1	15
53	Relationships between vegetation indices and root zone soil moisture under maize and soybean canopies in the US Corn Belt: a comparative study using a close-range sensing approach. International Journal of Remote Sensing, 2013, 34, 2814-2828.	1.3	14
54	Resilience to Large, â€œCatastrophicâ€•Wildfires in North America's Grassland Biome. Earth's Future, 2020, 8, e2020EF001487.	2.4	14

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55	Mesoscale Modeling of the Meteorological Impacts of Irrigation during the 2012 Central Plains Drought. Journal of Applied Meteorology and Climatology, 2017, 56, 1259-1283.	0.6	13
56	A Novel Strategy to Reconstruct NDVI Time-Series with High Temporal Resolution from MODIS Multi-Temporal Composite Products. Remote Sensing, 2021, 13, 1397.	1.8	11
57	Towards Routine Mapping of Crop Emergence within the Season Using the Harmonized Landsat and Sentinel-2 Dataset. Remote Sensing, 2021, 13, 5074.	1.8	11
58	Using enhanced GRACE water storage data to improve drought detection by the U.S. and North American Drought Monitors. , 2010, , .		10
59	Monitoring Drought Impact on Annual Forage Production in Semi-arid Grasslands: A Case Study of Nebraska Sandhills. Remote Sensing, 2019, 11, 2106.	1.8	10
60	Monitoring Climate Impacts on Annual Forage Production across U.S. Semi-Arid Grasslands. Remote Sensing, 2022, 14, 4.	1.8	10
61	Assessing responses of Betula papyrifera to climate variability in a remnant population along the Niobrara River Valley in Nebraska, U.S.A., through dendroecological and remote-sensing techniques. Canadian Journal of Forest Research, 2019, 49, 423-433.	0.8	9
62	PhenoCrop: An integrated satellite-based framework to estimate physiological growth stages of corn and soybeans. International Journal of Applied Earth Observation and Geoinformation, 2020, 92, 102188.	1.4	9
63	Exploring VIIRS Continuity with MODIS in an Expedited Capability for Monitoring Drought-Related Vegetation Conditions. Remote Sensing, 2021, 13, 1210.	1.8	9
64	Non-invasive estimation of relative water content in soybean leaves using infrared thermography. Israel Journal of Plant Sciences, 2012, 60, 25-36.	0.3	8
65	A Multi-sensor View of the 2012 Central Plains Drought from Space. Frontiers in Environmental Science, 2016, 4, .	1.5	8
66	Information Mining from Heterogeneous Data Sources: A Case Study on Drought Predictions. Information (Switzerland), 2017, 8, 79.	1.7	8
67	Errors associated with atmospheric correction methods for airborne imaging spectroscopy: Implications for vegetation indices and plant traits. Remote Sensing of Environment, 2021, 265, 112663.	4.6	8
68	Evaluating satellite-derived long-term historical precipitation datasets for drought monitoring in Chile. , 2016, , .		6
69	A Satelliteâ€Based Assessment of the Relative Contribution of Hydroclimatic Variables on Vegetation Growth in Global Agricultural and Nonagricultural Regions. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033228.	1.2	6
70	Preliminary assessment of an integrated SMOS and MODIS application for global agricultural drought monitoring. , 2017, , .		5
71	Calibration of a common shortwave multispectral camera system for quantitative agricultural applications. Precision Agriculture, 2020, 21, 922-935.	3.1	4
72	Forest Drought Response Index (ForDRI): A New Combined Model to Monitor Forest Drought in the Eastern United States. Remote Sensing, 2020, 12, 3605.	1.8	4

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73	Ecophysio-optical traits of semiarid Nebraska grasslands under different Juniperus virginiana and Pinus ponderosa canopy covers. Ecological Indicators, 2021, 131, 108159.	2.6	3
74	Advancements in Satellite Remote Sensing for Drought Monitoring. Drought and Water Crises, 2017, , 225-258.	0.1	3
75	The Vegetation Outlook (VegOut): A New Tool for Providing Outlooks of General Vegetation Conditions Using Data Mining Techniques. , 2007, , .		2
76	Simulated Atmospheric Response to Four Projected Land-Use Land-Cover Change Scenarios for 2050 in the North-Central United States. Earth Interactions, 2021, 25, 177-194.	0.7	1
77	Improving drought risk modelling: using multiple periods of satellite data with ensembles of data mining algorithms. International Journal of Society Systems Science, 2014, 6, 143.	0.1	0
78	Imaging Spectrometry and Fluorometry in Support of Flex: What Can We Learn from Multi-Scale Experiments?. , 2018, , .		0
79	Algorithm and Feature Selection for VegOut: A Vegetation Condition Prediction Tool. Lecture Notes in Computer Science, 2009, , 107-120.	1.0	0