

Christopher M U Neale

List of Publications by Year in descending order

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Version: 2024-02-01

111
papers

5,274
citations

94433

37
h-index

91884

69
g-index

112
all docs

112
docs citations

112
times ranked

4987
citing authors

#	ARTICLE	IF	CITATIONS
1	Evaluating the adaptability of an irrigation district to seasonal water availability using a decade of remotely sensed evapotranspiration estimates. <i>Agricultural Water Management</i> , 2022, 261, 107383.	5.6	1
2	Trends of extreme air temperature and precipitation and their impact on corn and soybean yields in Nebraska, USA. <i>Theoretical and Applied Climatology</i> , 2022, 147, 1379-1399.	2.8	15
3	Unmanned Aerial System-Based Data Ferrying over a Sensor Node Station Network in Maize. <i>Sensors</i> , 2022, 22, 1863.	3.8	0
4	Improving Accuracy of Unmanned Aerial System Thermal Infrared Remote Sensing for Use in Energy Balance Models in Agriculture Applications. <i>Remote Sensing</i> , 2021, 13, 1635.	4.0	11
5	Cotton canopy reflectance under variable solar zenith angles: Implications of use in evapotranspiration models. <i>Hydrological Processes</i> , 2021, 35, e14162.	2.6	8
6	Inter-relationships between water depletion and temperature differential in row crop canopies in a sub-humid climate. <i>Agricultural Water Management</i> , 2021, 256, 107061.	5.6	5
7	Recharge assessment in the context of expanding agricultural activity: Urucuia Aquifer System, western State of Bahia, Brazil. <i>Journal of South American Earth Sciences</i> , 2021, 112, 103601.	1.4	1
8	Spatio-temporal patterns of energy exchange and evapotranspiration during an intense drought for drylands in Brazil. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2020, 85, 101982.	2.8	21
9	Site-specific irrigation management in a sub-humid climate using a spatial evapotranspiration model with satellite and airborne imagery. <i>Agricultural Water Management</i> , 2020, 230, 105950.	5.6	27
10	Calibration of a common shortwave multispectral camera system for quantitative agricultural applications. <i>Precision Agriculture</i> , 2020, 21, 922-935.	6.0	4
11	Temporal and spatial variations of irrigation water use for commercial corn fields in Central Nebraska. <i>Agricultural Water Management</i> , 2020, 228, 105924.	5.6	11
12	Effects of Surface Heterogeneity Due to Drip Irrigation on Scintillometer Estimates of Sensible, Latent Heat Fluxes and Evapotranspiration over Vineyards. <i>Water (Switzerland)</i> , 2020, 12, 81.	2.7	9
13	A Decade of Unmanned Aerial Systems in Irrigated Agriculture in the Western U.S.. <i>Applied Engineering in Agriculture</i> , 2020, 36, 423-436.	0.7	12
14	Water productivity benchmarks: The case of maize and soybean in Nebraska. <i>Agricultural Water Management</i> , 2020, 234, 106122.	5.6	24
15	Water productivity in meat and milk production in the US from 1960 to 2016. <i>Environment International</i> , 2019, 132, 105084.	10.0	41
16	Forecasting corn yield at the farm level in Brazil based on the FAO-66 approach and soil-adjusted vegetation index (SAVI). <i>Agricultural Water Management</i> , 2019, 225, 105779.	5.6	29
17	Evaluation of evapotranspiration variations according to soil type using multivariate statistical analysis. <i>Geoderma</i> , 2019, 355, 113906.	5.1	7
18	Twenty-three unsolved problems in hydrology (UPH) – a community perspective. <i>Hydrological Sciences Journal</i> , 2019, 64, 1141-1158.	2.6	474

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19	Evaluation of evapotranspiration variations as a function of relief and terrain exposure through multivariate statistical analysis. <i>Ecohydrology and Hydrobiology</i> , 2019, 19, 307-315.	2.3	5
20	Variable Rate Irrigation of Maize and Soybean in West-Central Nebraska Under Full and Deficit Irrigation. <i>Frontiers in Big Data</i> , 2019, 2, 34.	2.9	10
21	Mapping Regional Turbulent Heat Fluxes via Assimilation of MODIS Land Surface Temperature Data into an Ensemble Kalman Smoother Framework. <i>Earth and Space Science</i> , 2019, 6, 2423-2442.	2.6	10
22	Evaluation of variable rate irrigation using a remote-sensing-based model. <i>Agricultural Water Management</i> , 2018, 203, 63-74.	5.6	56
23	Remote Sensing and GIS Techniques for Assessing Irrigation Performance: Case Study in Southern California. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2018, 144, .	1.0	24
24	Water productivity and crop yield: A simplified remote sensing driven operational approach. <i>Agricultural and Forest Meteorology</i> , 2018, 249, 501-511.	4.8	43
25	Influence of behavioral state, sex, and season on resource selection by jaguars (<i>Panthera</i>) <i>Tj ETQq1 1 0.784314 rgrBT /Overlock 10 TF</i>	2.2	10
26	Evaluation of the Weak Constraint Data Assimilation Approach for Estimating Turbulent Heat Fluxes at Six Sites. <i>Remote Sensing</i> , 2018, 10, 1994.	4.0	16
27	Water, Energy, and Carbon Footprints of Bioethanol from the U.S. and Brazil. <i>Environmental Science & Technology</i> , 2018, 52, 14508-14518.	10.0	63
28	Evaluation of a Hybrid Reflectance-Based Crop Coefficient and Energy Balance Evapotranspiration Model for Irrigation Management. <i>Transactions of the ASABE</i> , 2018, 61, 533-548.	1.1	24
29	Temporal evaluation of evapotranspiration for sugar cane, planted forest and native forest using landsat 8 images and a two-source energy balance. <i>Computers and Electronics in Agriculture</i> , 2018, 151, 70-76.	7.7	3
30	Soil water content monitoring for irrigation management: A geostatistical analysis. <i>Agricultural Water Management</i> , 2017, 188, 36-49.	5.6	39
31	AquaCrop-OS: An open source version of FAO's crop water productivity model. <i>Agricultural Water Management</i> , 2017, 181, 18-22.	5.6	142
32	Reflectance-based crop coefficients REDUX: For operational evapotranspiration estimates in the age of high producing hybrid varieties. <i>Agricultural Water Management</i> , 2017, 187, 140-153.	5.6	65
33	Distribution and Drivers of a Widespread, Invasive Wetland Grass, <i>Phragmites australis</i> , in Wetlands of the Great Salt Lake, Utah, USA. <i>Wetlands</i> , 2017, 37, 45-57.	1.5	41
34	DIFFERENT SOYBEAN PLANT POPULATIONS UNDER CENTRAL PIVOT IRRIGATION. <i>Engenharia Agricola</i> , 2017, 37, 441-452.	0.7	3
35	Mapping evapotranspiration with high-resolution aircraft imagery over vineyards using one- and two-source modeling schemes. <i>Hydrology and Earth System Sciences</i> , 2016, 20, 1523-1545.	4.9	78
36	Estimating Evapotranspiration of an Apple Orchard Using a Remote Sensing-Based Soil Water Balance. <i>Remote Sensing</i> , 2016, 8, 253.	4.0	53

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37	Stable nocturnal spectral characteristics over a vineyard (Conference Presentation). , 2016, , .		0
38	Irrigation Advisory Service and Performance Indicators in Baixo Acaraã Irrigation District, Brazil. Irrigation and Drainage, 2016, 65, 61-72.	1.7	13
39	Hydrothermal monitoring in Yellowstone National Park using airborne thermal infrared remote sensing. Remote Sensing of Environment, 2016, 184, 628-644.	11.0	25
40	Combining a water balance model with evapotranspiration measurements to estimate total available soil water in irrigated and rainfed vineyards. Agricultural Water Management, 2016, 165, 141-152.	5.6	51
41	Patterns of energy exchange for tropical ecosystems across a climate gradient in Mato Grosso, Brazil. Agricultural and Forest Meteorology, 2015, 202, 112-124.	4.8	65
42	Tools for evaluating and monitoring effectiveness of urban landscape water conservation interventions and programs. Landscape and Urban Planning, 2015, 139, 82-93.	7.5	17
43	Analyzing the effect of shadow on the relationship between ground cover and vegetation indices by using spectral mixture and radiative transfer models. Journal of Applied Remote Sensing, 2014, 8, 083562.	1.3	16
44	Modeling delivery performance in pressurized irrigation systems from simulated peak-demand flow configurations. Irrigation Science, 2014, 32, 295-317.	2.8	5
45	Investigating the influence of roughness length for heat transport (zoh) on the performance of SEBAL in semi-arid irrigated and dryland agricultural systems. Journal of Hydrology, 2014, 509, 231-244.	5.4	36
46	Use of Remote Sensing to Assess Changes in Wetland Plant Communities Over An 18-Year Period: A Case Study from the Bear River Migratory Bird Refuge, Great Salt Lake, Utah. Western North American Naturalist, 2014, 74, 33-46.	0.4	8
47	Comparison of the NLDAS Weather Forcing Model to Agrometeorological Measurements in the western United States. Journal of Hydrology, 2014, 510, 385-392.	5.4	23
48	Lysimetric evaluation of SEBAL using high resolution airborne imagery from BEAREX08. Advances in Water Resources, 2013, 59, 157-168.	3.8	33
49	Simulation of peak-demand hydrographs in pressurized irrigation delivery systems using a deterministic–stochastic combined model. Part II: model applications. Irrigation Science, 2013, 31, 193-208.	2.8	8
50	Simulation of peak-demand hydrographs in pressurized irrigation delivery systems using a deterministic–stochastic combined model. Part I: model development. Irrigation Science, 2013, 31, 209-224.	2.8	5
51	Application of MODIS images for modeling the energy balance components in the semi-arid conditions of Brazil. Proceedings of SPIE, 2013, , .	0.8	0
52	Retrieving water productivity parameters by using Landsat images in the Nilo Coelho irrigation scheme, Brazil. , 2013, , .		0
53	Temporal and Seasonal Variations of the Hot Spring Basin Hydrothermal System, Yellowstone National Park, USA. Remote Sensing, 2013, 5, 6587-6610.	4.0	7
54	Spectral Characteristics of Domestic and Wild Mammals. GIScience and Remote Sensing, 2012, 49, 597-608.	5.9	15

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55	Thermal remote sensing of snow cover to identify the extent of hydrothermal areas in Yellowstone National Park. Proceedings of SPIE, 2012, , .	0.8	0
56	Scintillometer-Based Estimates of Sensible Heat Flux Using Lidar-Derived Surface Roughness. Journal of Hydrometeorology, 2012, 13, 1317-1331.	1.9	9
57	ET Mapping with High-Resolution Airborne Remote Sensing Data in an Advective Semiarid Environment. Journal of Irrigation and Drainage Engineering - ASCE, 2012, 138, 416-423.	1.0	18
58	Fusion of remotely sensed data for soil moisture estimation using relevance vector and support vector machines. International Journal of Remote Sensing, 2012, 33, 6516-6552.	2.9	37
59	Evaluating the two-source energy balance model using local thermal and surface flux observations in a strongly advective irrigated agricultural area. Advances in Water Resources, 2012, 50, 120-133.	3.8	66
60	On the discrepancy between eddy covariance and lysimetry-based surface flux measurements under strongly advective conditions. Advances in Water Resources, 2012, 50, 62-78.	3.8	81
61	Patch scale turbulence over dryland and irrigated surfaces in a semi-arid landscape under advective conditions during BEAREX08. Advances in Water Resources, 2012, 50, 106-119.	3.8	18
62	Soil water content estimation using a remote sensing based hybrid evapotranspiration modeling approach. Advances in Water Resources, 2012, 50, 152-161.	3.8	64
63	Irrigation evaluation based on performance analysis and water accounting at the Bear River Irrigation Project (U.S.A.). Agricultural Water Management, 2011, 98, 1349-1363.	5.6	17
64	Trends in indices for extremes in daily temperature and precipitation over Utah, USA. International Journal of Climatology, 2011, 31, 1813-1822.	3.5	82
65	Water balance of irrigated areas: a remote sensing approach. Hydrological Processes, 2011, 25, 4132-4141.	2.6	26
66	Vegetation index-based crop coefficients to estimate evapotranspiration by remote sensing in agricultural and natural ecosystems. Hydrological Processes, 2011, 25, 4050-4062.	2.6	186
67	High-resolution mapping of river-hydrothermal water mixing: Yellowstone National Park. International Journal of Remote Sensing, 2011, 32, 2765-2777.	2.9	12
68	Estimating evapotranspiration of riparian vegetation using high resolution multispectral, thermal infrared and lidar data. Proceedings of SPIE, 2011, , .	0.8	5
69	Quantifying Urban Landscape Water Conservation Potential Using High Resolution Remote Sensing and GIS. Photogrammetric Engineering and Remote Sensing, 2011, 77, 1113-1122.	0.6	13
70	Flexible delivery schedules to improve farm irrigation and reduce pressure on groundwater: a case study in southern Italy. Irrigation Science, 2010, 28, 257-270.	2.8	18
71	Mapping saltcedar (Tamarix ramosissima) and other riparian and agricultural vegetation in the Lower Colorado River region using multi-spectral Landsat TM imagery. Geocarto International, 2010, 25, 649-662.	3.5	7
72	Assessing satellite-based basal crop coefficients for irrigated grapes (Vitis vinifera L.). Agricultural Water Management, 2010, 98, 45-54.	5.6	138

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73	Estimating hourly crop ET using a two-source energy balance model and multispectral airborne imagery. <i>Irrigation Science</i> , 2009, 28, 79-91.	2.8	36
74	A comparison of operational remote sensing-based models for estimating crop evapotranspiration. <i>Agricultural and Forest Meteorology</i> , 2009, 149, 1843-1853.	4.8	191
75	Daily evapotranspiration estimates from extrapolating instantaneous airborne remote sensing ET values. <i>Irrigation Science</i> , 2008, 27, 67-81.	2.8	111
76	Integrating remotely acquired and field data to assess effects of setback levees on riparian and aquatic habitats in glacial melt water rivers. <i>River Research and Applications</i> , 2008, 24, 355-372.	1.7	29
77	Situational Waste in Landscape Watering: Residential and Business Water Use in an Urban Utah Community. <i>Journal of the American Water Resources Association</i> , 2008, 44, 902-920.	2.4	62
78	Classification and Mapping of Riparian Systems Using Airborne Multispectral Videography. <i>Restoration Ecology</i> , 2008, 5, 103-112.	2.9	3
79	Detailed mapping of riparian vegetation in the middle Rio Grande River using high resolution multi-spectral airborne remote sensing. <i>Journal of Arid Environments</i> , 2008, 72, 1734-1744.	2.4	61
80	Airborne remote sensing applications in hydrology and water resources. <i>Proceedings of SPIE</i> , 2008, , .	0.8	0
81	Development and validation of canopy reflectance-based crop coefficient for potato. <i>Agricultural Water Management</i> , 2007, 88, 235-246.	5.6	64
82	A vegetation index based technique for spatial sharpening of thermal imagery. <i>Remote Sensing of Environment</i> , 2007, 107, 545-558.	11.0	367
83	A methodology for conducting diagnostic analyses and operational simulation in large-scale pressurized irrigation systems. , 2006, , .		2
84	Spatial and temporal variation in evapotranspiration using Raman lidar. <i>Advances in Water Resources</i> , 2006, 29, 369-381.	3.8	19
85	Tower and Aircraft Eddy Covariance Measurements of Water Vapor, Energy, and Carbon Dioxide Fluxes during SMACEX. <i>Journal of Hydrometeorology</i> , 2005, 6, 954-960.	1.9	78
86	Irrigation water management using high resolution airborne remote sensing. <i>Irrigation and Drainage Systems</i> , 2005, 19, 321-336.	0.5	44
87	NON-WATER-STRESSED BASELINES FOR CALCULATING CROP WATER STRESS INDEX (CWSI) FOR ALFALFA AND TALL FESCUE GRASS. <i>Transactions of the American Society of Agricultural Engineers</i> , 2005, 48, 653-661.	0.9	20
88	ESTIMATING SOIL HEAT FLUX FOR ALFALFA AND CLIPPED TALL FESCUE GRASS. <i>Applied Engineering in Agriculture</i> , 2005, 21, 401-409.	0.7	20
89	Utility of Remote Sensing-Based Two-Source Energy Balance Model under Low- and High-Vegetation Cover Conditions. <i>Journal of Hydrometeorology</i> , 2005, 6, 878-891.	1.9	253
90	Comparing Aircraft-Based Remotely Sensed Energy Balance Fluxes with Eddy Covariance Tower Data Using Heat Flux Source Area Functions. <i>Journal of Hydrometeorology</i> , 2005, 6, 923-940.	1.9	82

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91	COMPARISON OF ELEVEN VEGETATION INDICES FOR ESTIMATING PLANT HEIGHT OF ALFALFA AND GRASS. Applied Engineering in Agriculture, 2004, 20, 385-393.	0.7	88
92	Upscaling ground observations of vegetation water content, canopy height, and leaf area index during SMEX02 using aircraft and Landsat imagery. Remote Sensing of Environment, 2004, 92, 447-464.	11.0	203
93	Spatial source-area analysis of three-dimensional moisture fields from lidar, eddy covariance, and a footprint model. Agricultural and Forest Meteorology, 2003, 114, 213-234.	4.8	26
94	Characteristic length scale of input data in distributed models: implications for modeling grid size. Journal of Hydrology, 2000, 227, 128-139.	5.4	20
95	Monitoring land-surface snow conditions from SSM/I data using an artificial neural network classifier. IEEE Transactions on Geoscience and Remote Sensing, 1997, 35, 801-809.	6.3	11
96	Vulnerability of Riparian Vegetation to Catastrophic Flooding: Implications for Riparian Restoration. Restoration Ecology, 1997, 5, 75-84.	2.9	16
97	Identifying Sites for Riparian Wetland Restoration: Application of a Model to the Upper Arkansas River Basin. Restoration Ecology, 1997, 5, 85-102.	2.9	39
98	Classification and Mapping of Riparian Systems Using Airborne Multispectral Videography. Restoration Ecology, 1997, 5, 103-112.	2.9	25
99	Combining multifrequency microwave and optical data for crop management. Remote Sensing of Environment, 1997, 61, 96-109.	11.0	75
100	Vulnerability of Riparian Vegetation to Catastrophic Flooding: Implications for Riparian Restoration. Restoration Ecology, 1997, 5, 75-84.	2.9	1
101	Identifying Sites for Riparian Wetland Restoration: Application of a Model to the Upper Arkansas River Basin. Restoration Ecology, 1997, 5, 85-102.	2.9	3
102	SNOW WETNESS ESTIMATES OF VEGETATED TERRAIN FROM SATELLITE PASSIVE MICROWAVE DATA. Hydrological Processes, 1996, 10, 1619-1628.	2.6	14
103	An airborne multispectral video/radiometer remote sensing system: Development and calibration. Remote Sensing of Environment, 1994, 49, 187-194.	11.0	61
104	<title>Computation-efficient algorithms for image registration</title>. , 1994, , .		0
105	Development of Reflectance-Based Crop Coefficients for Corn. Transactions of the American Society of Agricultural Engineers, 1990, 32, 1891.	0.9	155
106	spectral Inputs Improve Corn Crop Coefficients and Irrigation Scheduling. Transactions of the American Society of Agricultural Engineers, 1990, 32, 1901.	0.9	50
107	Land-surface-type classification using microwave brightness temperatures from the Special Sensor Microwave/Imager. IEEE Transactions on Geoscience and Remote Sensing, 1990, 28, 829-838.	6.3	96
108	Land surface temperature derived from the SSM/I passive microwave brightness temperatures. IEEE Transactions on Geoscience and Remote Sensing, 1990, 28, 839-845.	6.3	164

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109	Sources of Error in Hydraulic Weighing Lysimeter Measurements. Transactions of the American Society of Agricultural Engineers, 1989, 32, 0081-0096.	0.9	3
110	Fetch requirements for bowen ratio measurements of latent and sensible heat fluxes. Agricultural and Forest Meteorology, 1989, 44, 261-273.	4.8	123
111	Crop Coefficients Derived from Reflected Canopy Radiation: A Concept. Transactions of the American Society of Agricultural Engineers, 1987, 30, 0703-0709.	0.9	148