

Michael B Richman

List of Publications by Year in descending order

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81
papers

3,992
citations

279798

23
h-index

118850

62
g-index

89
all docs

89
docs citations

89
times ranked

3228
citing authors

#	ARTICLE	IF	CITATIONS
1	A cautionary note concerning a commonly applied eigenanalysis procedure. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 40, 50.	1.6	11
2	Constructing an Efficient Machine Learning Model for Tornado Prediction. <i>International Journal of Information Technology and Decision Making</i> , 2020, 19, 1177-1187.	3.9	2
3	Machine Learning for Attribution of Heat and Drought in Southwestern Australia. <i>Procedia Computer Science</i> , 2020, 168, 3-10.	2.0	6
4	The 2015-2017 Cape Town Drought: Attribution and Prediction Using Machine Learning. <i>Procedia Computer Science</i> , 2018, 140, 248-257.	2.0	13
5	The Modulating Influence of Indian Ocean Sea Surface Temperatures on Australian Region Seasonal Tropical Cyclone Counts. <i>Journal of Climate</i> , 2017, 30, 4843-4856.	3.2	18
6	A data-driven kernel method assimilation technique for geophysical modelling. <i>Optimization Methods and Software</i> , 2017, 32, 237-249.	2.4	2
7	Reducing Tropical Cyclone Prediction Errors Using Machine Learning Approaches. <i>Procedia Computer Science</i> , 2017, 114, 314-323.	2.0	22
8	Classifying Drought in Ethiopia Using Machine Learning. <i>Procedia Computer Science</i> , 2016, 95, 229-236.	2.0	14
9	Uniqueness and Causes of the California Drought. <i>Procedia Computer Science</i> , 2015, 61, 428-435.	2.0	15
10	Seasonal-to-Interannual Variability of Ethiopia/Horn of Africa Monsoon. Part II: Statistical Multimodel Ensemble Rainfall Predictions. <i>Journal of Climate</i> , 2015, 28, 3511-3536.	3.2	20
11	Data selection using support vector regression. <i>Advances in Atmospheric Sciences</i> , 2015, 32, 277-286.	4.3	5
12	Seasonal Tropical Cyclone Predictions Using Optimized Combinations of ENSO Regions: Application to the Coral Sea Basin. <i>Journal of Climate</i> , 2014, 27, 8527-8542.	3.2	16
13	Cluster Analysis of North Atlantic Tropical Cyclones. <i>Procedia Computer Science</i> , 2014, 36, 293-300.	2.0	20
14	Machine-learning classifiers for imbalanced tornado data. <i>Computational Management Science</i> , 2014, 11, 403-418.	1.3	18
15	Attribution and Prediction of Maximum Temperature Extremes in SE Australia. <i>Procedia Computer Science</i> , 2014, 36, 612-617.	2.0	14
16	Classification of Changes in Extreme Heat Over Southeastern Australia. <i>Procedia Computer Science</i> , 2013, 20, 148-155.	2.0	2
17	Range-Correcting Azimuthal Shear in Doppler Radar Data. <i>Weather and Forecasting</i> , 2013, 28, 194-211.	1.4	23
18	High Dimensional Dataset Compression Using Principal Components. <i>Open Journal of Statistics</i> , 2013, 03, 356-366.	0.7	2

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19	Synoptic Composites of Tornadoic and Nontornadoic Outbreaks. <i>Monthly Weather Review</i> , 2012, 140, 2590-2608.	1.4	54
20	An Assessment of Areal Coverage of Severe Weather Parameters for Severe Weather Outbreak Diagnosis. <i>Weather and Forecasting</i> , 2012, 27, 809-831.	1.4	7
21	Assessing Atmospheric Variability using Kernel Principal Component Analysis. <i>Procedia Computer Science</i> , 2012, 12, 288-293.	2.0	7
22	Adaptive Machine Learning Approaches to Seasonal Prediction of Tropical Cyclones. <i>Procedia Computer Science</i> , 2012, 12, 276-281.	2.0	20
23	An automated technique to categorize storm type from radar and near-storm environment data. <i>Atmospheric Research</i> , 2012, 111, 104-113.	4.1	9
24	Spatial coherence of rainfall variations using the Oklahoma Mesonet. <i>International Journal of Climatology</i> , 2012, 32, 843-853.	3.5	7
25	Identification of severe weather outbreaks using kernel principal component analysis. <i>Procedia Computer Science</i> , 2011, 6, 231-236.	2.0	12
26	Linear classification tikhonov regularization knowledge-based support vector machine for tornado forecasting. <i>Computational Management Science</i> , 2011, 8, 281-297.	1.3	0
27	Teaching Mathematics with Classroom Voting With and Without Clickers. , 2011, , .		9
28	The Role of Atmospheric Conditions in Determining Intensity of Crepuscular and Anticrepuscular Rays. <i>Monthly Weather Review</i> , 2010, 138, 2883-2894.	1.4	1
29	Reaching Scientific Consensus Through a Competition. <i>Bulletin of the American Meteorological Society</i> , 2010, 91, 1423-1427.	3.3	10
30	Evaluation of WRF Model Simulations of Tornadoic and Nontornadoic Outbreaks Occurring in the Spring and Fall. <i>Monthly Weather Review</i> , 2010, 138, 4098-4119.	1.4	27
31	The Added Value of Surface Data to Radar-Derived Rainfall-Rate Estimation Using an Artificial Neural Network. <i>Journal of Atmospheric and Oceanic Technology</i> , 2010, 27, 1547-1554.	1.3	3
32	Classification and regionalization through kernel principal component analysis. <i>Physics and Chemistry of the Earth</i> , 2010, 35, 316-328.	2.9	21
33	Machine Learning Methods for Data Assimilation. , 2010, , 105-112.		5
34	Machine Learning Techniques for Imbalanced Data: An Application for Tornado Detection. , 2010, , 509-516.		2
35	Evaluation of WRF Forecasts of Tornadoic and Nontornadoic Outbreaks When Initialized with Synoptic-Scale Input. <i>Monthly Weather Review</i> , 2009, 137, 1250-1271.	1.4	43
36	Objective Classification of Tornadoic and Nontornadoic Severe Weather Outbreaks. <i>Monthly Weather Review</i> , 2009, 137, 4355-4368.	1.4	45

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37	Missing Data Imputation Through Machine Learning Algorithms. , 2009, , 153-169.		21
38	Real-Time Prediction Using Kernel Methods and Data Assimilation. , 2009, , 35-42.		0
39	Can principal component analysis provide atmospheric circulation or teleconnection patterns?. International Journal of Climatology, 2008, 28, 703-726.	3.5	93
40	Interannual Variability of Tropical Cyclones in the Australian Region: Role of Large-Scale Environment. Journal of Climate, 2008, 21, 1083-1103.	3.2	90
41	Statistical Modeling of Downslope Windstorms in Boulder, Colorado. Weather and Forecasting, 2008, 23, 1176-1194.	1.4	24
42	Statistical Differences of Quasigeostrophic Variables, Stability, and Moisture Profiles in North American Storm Tracks. Monthly Weather Review, 2007, 135, 2312-2338.	1.4	14
43	Weekly precipitation cycles? Lack of evidence from United States surface stations. Geophysical Research Letters, 2007, 34, .	4.0	49
44	Active Learning with Support Vector Machines for Tornado Prediction. Lecture Notes in Computer Science, 2007, , 1130-1137.	1.3	18
45	Ocean Surface Wind Vector Forecasting Using Support Vector Regression. , 2007, , 333-338.		1
46	Learning networks for tornado detection. International Journal of General Systems, 2006, 35, 93-107.	2.5	2
47	Machine Learning Classifiers for Tornado Detection: Sensitivity Analysis on Tornado Data Sets. , 2006, , 679-684.		1
48	Learning networks in rainfall estimation. Computational Management Science, 2005, 2, 229-251.	1.3	5
49	An Observational Study of Derecho-Producing Convective Systems. Weather and Forecasting, 2004, 19, 320-337.	1.4	85
50	Prediction of Rainfall from WSR-88D Radar Using Kernel-Based Methods. International Journal of Smart Engineering System Design, 2003, 5, 429-438.	0.2	5
51	Tornado Detection with Support Vector Machines. Lecture Notes in Computer Science, 2003, , 289-298.	1.3	16
52	Data mining techniques for improved WSR-88D rainfall estimation. Computers and Industrial Engineering, 2002, 43, 775-786.	6.3	32
53	Euclidean Distance as a Similarity Metric for Principal Component Analysis. Monthly Weather Review, 2001, 129, 540-549.	1.4	97
54	Title is missing!. Climatic Change, 2000, 44, 89-121.	3.6	7

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55	Title is missing!. Climatic Change, 1999, 42, 31-43.	3.6	79
56	Damaging Weather Conditions in the United States: A Selection of Data Quality and Monitoring Issues. Climatic Change, 1999, 42, 69-87.	3.6	1
57	Relationships between the Definition of the Hyperplane Width to the Fidelity of Principal Component Loading Patterns. Journal of Climate, 1999, 12, 1557-1576.	3.2	54
58	Statistics Education in the Atmospheric Sciences. Bulletin of the American Meteorological Society, 1999, 80, 2087-2097.	3.3	3
59	Observed Nonlinearities of Monthly Teleconnections between Tropical Pacific Sea Surface Temperature Anomalies and Central and Eastern North American Precipitation. Journal of Climate, 1998, 11, 1812-1835.	3.2	79
60	POTENTIAL EFFECTS OF CLIMATE CHANGE ON AQUATIC ECOSYSTEMS OF THE GREAT PLAINS OF NORTH AMERICA. Hydrological Processes, 1997, 11, 993-1021.	2.6	1
61	On the Application of Cluster Analysis to Growing Season Precipitation Data in North America East of the Rockies. Journal of Climate, 1995, 8, 897-931.	3.2	282
62	The influence of synoptic scale meteorology on transport of urban air to remote locations in the SouthWestern United States Of America. Atmospheric Environment, 1995, 29, 1609-1618.	4.1	7
63	Comments on: "The effect of domain shape on principal components analyses". International Journal of Climatology, 1993, 13, 203-218.	3.5	22
64	Recent hydroclimatic fluctuations and their effects on water resources in Illinois. Climatic Change, 1993, 24, 249-269.	3.6	19
65	The use of Procrustes Target Analysis to discriminate dominant source regions of fine sulfur in the western U.S.A.. Atmospheric Environment Part A General Topics, 1993, 27, 475-481.	1.3	14
66	Climate regionalization and rotation of principal components. International Journal of Climatology, 1991, 11, 1-25.	3.5	164
67	A cautionary note concerning a commonly applied eigenanalysis procedure. Tellus, Series B: Chemical and Physical Meteorology, 1988, 40B, 50-58.	1.6	26
68	Procrustes target analysis: A multivariate tool for identification of climate fluctuations. Journal of Geophysical Research, 1988, 93, 10989-11003.	3.3	11
69	Pattern analysis of growing season precipitation in Southern Canada. Atmosphere - Ocean, 1987, 25, 137-158.	1.6	31
70	Rotation of principal components: A reply. Journal of Climatology, 1987, 7, 511-520.	0.7	61
71	Rotation of principal components. Journal of Climatology, 1986, 6, 293-335.	0.7	1,526
72	A principal component analysis of sulfur concentrations in the western United States. Atmospheric Environment, 1986, 20, 606-607.	1.0	1

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73	Climatic Pattern Analysis of Three- and Seven-Day Summer Rainfall in the Central United States: Some Methodological Considerations and a Regionalization. <i>Journal of Climate and Applied Meteorology</i> , 1985, 24, 1325-1343.	1.0	183
74	A principal component analysis of sulfur concentrations in the Western United States. <i>Atmospheric Environment</i> , 1985, 19, 1972-1973.	1.0	2
75	Spatial Coherence of Monthly Precipitation in the United States. <i>Monthly Weather Review</i> , 1982, 110, 272-286.	1.4	80
76	Obliquely Rotated Principal Components: An Improved Meteorological Map Typing Technique?. <i>Journal of Applied Meteorology</i> , 1981, 20, 1145-1159.	1.1	192
77	Seasonality in the Associations between Surface Temperatures over the United States and the North Pacific Ocean. <i>Monthly Weather Review</i> , 1981, 109, 767-783.	1.4	52
78	Determination of the optimal batch size in incremental approaches: an application to tornado detection. , 0, , .		1
79	Identification of Intraseasonal Modes of Variability Using Rotated Principal Components. , 0, , .		5
80	Active Learning with Kernel Machines for Tornado Detection. , 0, , 131-137.		0
81	A Pipeline Support Vector Regression Method to Thin Large Ocean Surface Wind Data On-Line. , 0, , 203-210.		0