Kenneth E Kunkel

List of Publications by Year
in descending order

124 papers	9,865 citations	50276 46 h-index	38395 95 g-index
133 all docs	133 docs citations	133 times ranked	9633 citing authors

#	Article	IF	Citations
1	Observed Variability and Trends in Extreme Climate Events: A Brief Review[*]. Bulletin of the American Meteorological Society, 2000, 81, 417-425.	3.3	1,146
2	An Introduction to Trends in Extreme Weather and Climate Events: Observations, Socioeconomic Impacts, Terrestrial Ecological Impacts, and Model Projections*. Bulletin of the American Meteorological Society, 2000, 81, 413-416.	3.3	478
3	Long-Term Trends in Extreme Precipitation Events over the Conterminous United States and Canada. Journal of Climate, 1999, 12, 2515-2527.	3.2	435
4	Monitoring and Understanding Trends in Extreme Storms: State of Knowledge. Bulletin of the American Meteorological Society, 2013, 94, 499-514.	3.3	426
5	Temporal Fluctuations in Weather and Climate Extremes That Cause Economic and Human Health Impacts: A Review. Bulletin of the American Meteorological Society, 1999, 80, 1077-1098.	3.3	377
6	Monitoring and Understanding Changes in Heat Waves, Cold Waves, Floods, and Droughts in the United States: State of Knowledge. Bulletin of the American Meteorological Society, 2013, 94, 821-834.	3.3	365
7	Impacts and Responses to the 1995 Heat Wave: A Call to Action. Bulletin of the American Meteorological Society, 1996, 77, 1497-1506.	3.3	282
8	Probable maximum precipitation and climate change. Geophysical Research Letters, 2013, 40, 1402-1408.	4.0	249
9	North American Trends in Extreme Precipitation. Natural Hazards, 2003, 29, 291-305.	3.4	240
10	Meteorological Causes of the Secular Variations in Observed Extreme Precipitation Events for the Conterminous United States. Journal of Hydrometeorology, 2012, 13, 1131-1141.	1.9	223
11	Temporal variations of extreme precipitation events in the United States: 1895-2000. Geophysical Research Letters, 2003, 30, n/a-n/a.	4.0	196
12	A Preliminary Synthesis of Modeled Climate Change Impacts on U.S. Regional Ozone Concentrations. Bulletin of the American Meteorological Society, 2009, 90, 1843-1864.	3.3	175
13	Changes in extreme events and the potential impacts on human health. Journal of the Air and Waste Management Association, 2018, 68, 265-287.	1.9	165
14	Regional climate model simulation of summer precipitation diurnal cycle over the United States. Geophysical Research Letters, 2004, 31, .	4.0	159
15	Regional Climate Model Simulation of U.S. Precipitation during 1982â€“2002. Part I: Annual Cycle. Journal of Climate, 2004, 17, 3510-3529.	3.2	156
16	The Nature and Impacts of the July 1999 Heat Wave in the Midwestern United States: Learning from the Lessons of 1995. Bulletin of the American Meteorological Society, 2001, 82, 1353-1367.	3.3	155
17	Temporal variations in frost-free season in the United States: 1895â€“2000. Geophysical Research Letters, 2004, 31, .	4.0	148
18	The July 1995 Heat Wave in the Midwest: A Climatic Perspective and Critical Weather Factors. Bulletin of the American Meteorological Society, 1996, 77, 1507-1518.	3.3	147

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19	The response of Great Lakes water levels to future climate scenarios with an emphasis on Lake Michigan-Huron. Journal of Great Lakes Research, 2010, 36, 51-58.	1.9	136
20	Detection and attribution of climate extremes in the observed record. Weather and Climate Extremes, 2016, 11, 17-27.	4.1	132
21	Observationalâ€•and modelâ€based trends and projections of extreme precipitation over the contiguous United States. Earth's Future, 2014, 2, 99-113.	6.3	131
22	Regional Climateâ€“Weather Research and Forecasting Model. Bulletin of the American Meteorological Society, 2012, 93, 1363-1387.	3.3	129
23	Can CGCMs Simulate the Twentieth-Century â€œWarming Holeâ€•in the Central United States?. Journal of Climate, 2006, 19, 4137-4153.	3.2	127
24	Regional climate model downscaling of the U.S. summer climate and future change. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	124
25	Climatic Aspects of the 1993 Upper Mississippi River Basin Flood. Bulletin of the American Meteorological Society, 1994, 75, 811-822.	3.3	123
26	Development of a Regional Climate Model for U.S. Midwest Applications. Part I: Sensitivity to Buffer Zone Treatment. Journal of Climate, 2001, 14, 4363-4378.	3.2	117
27	Recent increases in U.S. heavy precipitation associated with tropical cyclones. Geophysical Research Letters, 2010, 37, .	4.0	115
28	Trends and Extremes in Northern Hemisphere Snow Characteristics. Current Climate Change Reports, 2016, 2, 65-73.	8.6	110
29	Regional climate models downscaling analysis of general circulation models present climate biases propagation into future change projections. Geophysical Research Letters, 2008, 35, .	4.0	108
30	Monitoring and Understanding Changes in Extremes: Extratropical Storms, Winds, and Waves. Bulletin of the American Meteorological Society, 2014, 95, 377-386.	3.3	94
31	Effects of ocean warming on growth and distribution of dinoflagellates associated with ciguatera fish poisoning in the Caribbean. Ecological Modelling, 2015, 316, 194-210.	2.5	91
32	The Relative Importance of Warm Rain and Melting Processes in Freezing Precipitation Events. Journal of Applied Meteorology and Climatology, 2000, 39, 1185-1195.	1.7	86
33	Trends in Twentieth-Century U.S. Snowfall Using a Quality-Controlled Dataset. Journal of Atmospheric and Oceanic Technology, 2009, 26, 33-44.	1.3	75
34	Trend Identification in Twentieth-Century U.S. Snowfall: The Challenges. Journal of Atmospheric and Oceanic Technology, 2007, 24, 64-73.	1.3	65
35	The Seasonal Nature of Extreme Hydrological Events in the Northeastern United States. Journal of Hydrometeorology, 2015, 16, 2065-2085.	1.9	65
36	A Synoptic Weather Pattern and Sounding-Based Climatology of Freezing Precipitation in the United States East of the Rocky Mountains. Journal of Applied Meteorology and Climatology, 2001, 40, 1724-1747.	1.7	63

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37	Climate-Related Fluctuations in Midwestern Floods during 1921â€“1985. Journal of Water Resources Planning and Management - ASCE, 1995, 121, 326-334.	2.6	62
38	Assessment of Potential Effects of Climate Change on Heavy Lake-Effect Snowstorms Near Lake Erie. Journal of Great Lakes Research, 2002, 28, 521-536.	1.9	61
39	The twentieth-century pluvial in the western United States. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	61
40	Simple Procedures for Extrapolation of Humidity Variables in the Mountainous Western United States. Journal of Climate, 1989, 2, 656-670.	3.2	60
41	MODELING THE IMPACT OF VARIABLE CLIMATIC FACTORS ON THE CROSSOVER OF CULEX RESTAUNS AND CULEX PIPIENS (DIPTERA: CULICIDAE), VECTORS OF WEST NILE VIRUS IN ILLINOIS. American Journal of Tropical Medicine and Hygiene, 2006, 74, 168-173.	1.4	60
42	Regional Climate Model Projections and Uncertainties of U.S. Summer Heat Waves. Journal of Climate, 2010, 23, 4447-4458.	3.2	59
43	Relationship of ENSO to snowfall and related cyclone activity in the contiguous United States. Journal of Geophysical Research, 1999, 104, 19425-19434.	3.3	58
44	Localized Changes in Heat Wave Properties Across the United States. Earth's Future, 2019, 7, 300-319.	6.3	58
45	Regional Climate Model Simulation of U.S.â€“Mexico Summer Precipitation Using the Optimal Ensemble of Two Cumulus Parameterizations. Journal of Climate, 2007, 20, 5201-5207.	3.2	53
46	Surface Boundary Conditions for Mesoscale Regional Climate Models. Earth Interactions, 2005, 9, 1-28.	1.5	50
47	A new look at lake-effect snowfall trends in the Laurentian Great Lakes using a temporally homogeneous data set. Journal of Great Lakes Research, 2009, 35, 23-29.	1.9	50
48	Changes in weather and climate extremes: State of knowledge relevant to air and water quality in the United States. Journal of the Air and Waste Management Association, 2014, 64, 184-197.	1.9	50
49	Seasonal and regional variations in extreme precipitation event frequency using CMIP5. Geophysical Research Letters, 2016, 43, 5385-5393.	4.0	49
50	Rapidly Expanding Uses of Climate Data and Information in Agriculture and Water Resources: Causes and Characteristics of New Applications. Bulletin of the American Meteorological Society, 1999, 80, 821-830.	3.3	47
51	Estimate of the aerodynamic roughness parameters over an incomplete canopy cover of cotton. Agricultural and Forest Meteorology, 1989, 46, 91-105.	4.8	45
52	The Boardman Regional Flux Experiment. Bulletin of the American Meteorological Society, 1992, 73, 1785-1795.	3.3	45
53	Quality Control of Pre-1948 Cooperative Observer Network Data. Journal of Atmospheric and Oceanic Technology, 2005, 22, 1691-1705.	1.3	44
54	Precipitation Extremes: Trends and Relationships with Average Precipitation and Precipitable Water in the Contiguous United States. Journal of Applied Meteorology and Climatology, 2020, 59, 125-142.	1.5	44

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55	A Monte Carlo Assessment of Uncertainties in Heavy Precipitation Frequency Variations. Journal of Hydrometeorology, 2007, 8, 1152-1160.	1.9	42
56	Trends in Twentieth-Century U.S. Extreme Snowfall Seasons. Journal of Climate, 2009, 22, 6204-6216.	3.2	41
57	Instantaneous and daily values of the surface energy balance over agricultural fields using remote sensing and a reference field in an arid environment. Remote Sensing of Environment, 1990, 32, 125-141.	11.0	40
58	Observations and Regional Climate Model Simulations of Heavy Precipitation Events and Seasonal Anomalies: A Comparison. Journal of Hydrometeorology, 2002, 3, 322-334.	1.9	36
59	Future Climate: Projected Average. , 2013, , 101-125.		34
60	An Expanded Digital Daily Database for Climatic Resources Applications in the Midwestern United States. Bulletin of the American Meteorological Society, 1998, 79, 1357-1366.	3.3	33
61	Synthesis of public water supply use in the United States: Spatioâ€temporal patterns and socioâ€economic controls. Earth's Future, 2017, 5, 771-788.	6.3	33
62	Great Lakes Hydrology Under Transposed Climates. Climatic Change, 1998, 38, 405-433.	3.6	31
63	Do CGCMs Simulate the North American Monsoon Precipitation Seasonalâ€“Interannual Variability?. Journal of Climate, 2008, 21, 4424-4448.	3.2	31
64	Observed Climatological Relationships of Extreme Daily Precipitation Events With Precipitable Water and Vertical Velocity in the Contiguous United States. Geophysical Research Letters, 2020, 47, e2019GL086721.	4.0	31
65	Performance of Quality Assurance Procedures on Daily Precipitation. Journal of Atmospheric and Oceanic Technology, 2007, 24, 821-834.	1.3	30
66	Changes in Instruments and Sites Affecting Historical Weather Records: A Case Study. Journal of Atmospheric and Oceanic Technology, 2006, 23, 825-828.	1.3	29
67	Operational Soil Moisture Estimation for the Midwestern United States. Journal of Applied Meteorology and Climatology, 1990, 29, 1158-1166.	1.7	28
68	An Assessment of Rainfall from Hurricanes Harvey and Florence Relative to Other Extremely Wet Storms in the United States. Geophysical Research Letters, 2019, 46, 13500-13506.	4.0	28
69	Climate Factors that Caused the Unique Tall Grass Prairie in the Central United States. Physical Geography, 2002, 23, 259-280.	1.4	26
70	Sensitivity of future ozone concentrations in the northeast USA to regional climate change. Mitigation and Adaptation Strategies for Global Change, 2008, 13, 597-606.	2.1	25
71	Long-term Observations for Monitoring Extremes in the Americas. Climatic Change, 1999, 42, 285-308.	3.6	23
72	Modeling the impact of variable climatic factors on the crossover of Culex restauns and Culex pipiens (Diptera: culicidae), vectors of West Nile virus in Illinois. American Journal of Tropical Medicine and Hygiene, 2006, 74, 168-73.	1.4	23

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73	Causes for Record High Flood Losses in the Central United States. Water International, 2001, 26, 223-230.	1.0	22
74	A framework for examining climate-driven changes to the seasonality and geographical range of coastal pathogens and harmful algae. Climate Risk Management, 2015, 8, 16-27.	3.2	22
75	Temporal and Spatial Characteristics of Heavy-Precipitation Events in the Midwest. Monthly Weather Review, 1993, 121, 858-866.	1.4	20
76	Further Investigation of a Physically Based, Nondimensional Parameter for Discriminating between Locations of Freezing Rain and Ice Pellets. Weather and Forecasting, 2001, 16, 185-191.	1.4	20
77	Intermittent turbulence in measurements of the temperature structure parameter under very stable conditions. Boundary-Layer Meteorology, 1982, 22, 49-60.	2.3	19
78	A surface energy budget view of the 1988 midwestern United States drought. Boundary-Layer Meteorology, 1989, 48, 217-225.	2.3	19
79	GCM Simulations of the Climate in the Central United States. Journal of Climate, 2005, 18, 1016-1031.	3.2	19
80	Seasonal Simulation of Tropospheric Ozone over the Midwestern and Northeastern United States: An Application of a Coupled Regional Climate and Air Quality Modeling System. Journal of Applied Meteorology and Climatology, 2007, 46, 945-960.	1.5	19
81	Automated detection of weather fronts using a deep learning neural network. Advances in Statistical Climatology, Meteorology and Oceanography, 2019, 5, 147-160.	0.9	19
82	Physical Modeling of U.S. Cotton Yields and Climate Stresses during 1979 to 2005. Agronomy Journal, 2012, 104, 675-683.	1.8	18
83	Precipitation and Fatal Motor Vehicle Crashes: Continental Analysis with High-Resolution Radar Data. Bulletin of the American Meteorological Society, 2019, 100, 1453-1461.	3.3	18
84	Present Weather and Climate: Evolving Conditions. , 2013, , 74-100.		18
85	Record Flood-Producing Rainstorms of 17â€“18 July 1996 in the Chicago Metropolitan Area. Part I: Synoptic and Mesoscale Features. Journal of Applied Meteorology and Climatology, 1999, 38, 257-265.	1.7	17
86	A Distributed Cotton Growth Model Developed from GOSSYM and Its Parameter Determination. Agronomy Journal, 2012, 104, 661-674.	1.8	16
87	Heterogeneous response of global precipitation concentration to global warming. International Journal of Climatology, 2021, 41, E2347.	3.5	16
88	Trends and Variability in Severe Snowstorms East of the Rocky Mountains*. Journal of Hydrometeorology, 2014, 15, 1762-1777.	1.9	15
89	Surface Energy Budget and Fuel Moisture. , 2001, , 303-350.		15
90	A Real-Time Climate Information System for the Midwestern United States. Bulletin of the American Meteorological Society, 1990, 71, 1601-1609.	3.3	14

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91	Implementation of a Semiphysical Model for Examining Solar Radiation in the Midwest. Journal of Applied Meteorology and Climatology, 1995, 34, 1905-1915.	1.7	14
92	Sea surface temperature forcing of the upward trend in U.S. extreme precipitation. Journal of Geophysical Research, 2003, 108, ACL 6-1.	3.3	14
93	Use of Real-Time Multisensor Data to Assess the Relationship of Normalized Corn Yield with Monthly Rainfall and Heat Stress across the Central United States. Journal of Applied Meteorology and Climatology, 2005, 44, 1667-1676.	1.7	14
94	Is the monthly temperature climate of the United States becoming more extreme?. Geophysical Research Letters, 2015, 42, 629-636.	4.0	14
95	Simulation of Daily Extreme Precipitation over the United States in the CMIP5 30-Yr Decadal Prediction Experiment. Journal of Applied Meteorology and Climatology, 2019, 58, 875-886.	1.5	14
96	Multivariate Downscaling Approach Preserving Cross Correlations across Climate Variables for Projecting Hydrologic Fluxes. Journal of Hydrometeorology, 2017, 18, 2187-2205.	1.9	13
97	Climatic Means and Normalsâ€"A Statement of the American Association of State Climatologists (AASC). Bulletin of the American Meteorological Society, 1990, 71, 201-204.	3.3	13
98	Global Land Surface Extremes of Precipitation: Data Limitations and Trends. Journal of Extreme Events, 2015, 02, 1550004.	1.1	12
99	Development of a Submonthly Temperature Product to Monitor Near-Real-Time Climate Conditions and Assess Long-Term Heat Events in the United States. Journal of Applied Meteorology and Climatology, 2019, 58, 2653-2674.	1.5	12
100	Transposed Climates for Study of Water Supply Variability on the Laurentian Great Lakes. Climatic Change, 1998, 38, 387-404.	3.6	11
101	Lidar determination of horizontal and vertical variability in water vapor over cotton. Remote Sensing of Environment, 1990, 32, 81-90.	11.0	9
102	Title is missing!. Climatic Change, 2003, 61, 101-122.	3.6	6
103	Innovations in science and scenarios for assessment. Climatic Change, 2016, 135, 55-68.	3.6	6
104	Spatial heterogeneity of albedo over a snow-covered agricultural landscape. Journal of Geophysical Research, 1999, 104, 19551-19557.	3.3	5
105	Predicting the Seasonal Shift in Mosquito Populations Preceding the Onset of the West Nile Virus in Central Illinois. Bulletin of the American Meteorological Society, 2011, 92, 1173-1180.	3.3	5
106	Reply to â€œComments on â€˜Monitoring and Understanding Trends in Extreme Storms: State of Knowledgeâ€™â€•. Bulletin of the American Meteorological Society, 2015, 96, 1177-1179.	3.3	5
107	ASSESSING IMPACTS OF A CLIMATOLOGICALLY UNIQUE YEAR (1990) IN THE MIDWEST. Physical Geography, 1992, 13, 180-190.	1.4	4
108	A Climatic Perspective on the 1993 Flooding Rains in the Upper Mississippi River Basin. Water International, 1994, 19, 186-189.	1.0	4

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109	Late Spring Freezes in the Central USA: Climatological Aspects. Journal of Production Agriculture, 1995, 8, 190-198.	0.4	4
110	Laurentian Great Lakes Hydrology and Lake Levels under the Transposed 1993 Mississippi River Flood Climate. Journal of Great Lakes Research, 1997, 23, 317-327.	1.9	4
111	Innovations in information management and access for assessments. Climatic Change, 2016, 135, 69-83.	3.6	4
112	Evaluation of CMIP5 ability to reproduce twentieth century regional trends in surface air temperature and precipitation over CONUS. Climate Dynamics, 2019, 53, 5459-5480.	3.8	4
113	Investigating the association between late spring Gulf of Mexico sea surface temperatures and U.S. Gulf Coast precipitation extremes with focus on Hurricane Harvey. Environmetrics, 2020, 31, e2595.	1.4	4
114	A Regional Response to Climate Information Needs during the 1993 Flood. Bulletin of the American Meteorological Society, 1995, 76, 2415-2421.	3.3	3
115	Uncertainties in Observed Changes in Climate Extremes. Water Science and Technology Library, 2013, , 287-307.	0.3	3
116	Monthly Extreme Temperature Trends in CMIP5 Hindcast/Prediction Simulations, 1981â€“2010 and 2006â€“35. Journal of Applied Meteorology and Climatology, 2017, 56, 1141-1154.	1.5	3
117	Extreme Precipitation Trends and Meteorological Causes Over the Laurentian Great Lakes. Frontiers in Water, 2022, 4, .	2.3	3
118	Evaluation of Total Precipitable Water from CRCM4 using the NVAP-MEaSUREs Dataset and ERA-Interim Reanalysis Data. Atmosphere - Ocean, 2016, 54, 541-548.	1.6	2
119	Development of a Rapid Response Capability to Evaluate Causes of Extreme Temperature and Drought Events in the United States. Bulletin of the American Meteorological Society, 2022, 103, S14-S20.	3.3	2
120	Mapping Heat Wave Hazard in Urban Areas: A Novel Multi-Criteria Decision Making Approach. Atmosphere, 2022, 13, 1037.	2.3	2
121	Two-dimensional field of thermal turbulence at the edge of an escarpment. Boundary-Layer Meteorology, 1982, 23, 473-487.	2.3	1
122	Evaluating the Reliability of the U.S. Cooperative Observer Program Precipitation Observations for Extreme Events Analysis Using the LTAR Network. Journal of Atmospheric and Oceanic Technology, 2019, 36, 317-332.	1.3	1
123	Estimating Summer Design Temperatures from Daily Maximum Temperatures in New Mexico. Journal of Climate and Applied Meteorology, 1986, 25, 517-523.	1.0	0
124	Reply to â€œComments on â€˜Monitoring and Understanding Trends in Extreme Storms: State of Knowledgeâ€™â€•. Bulletin of the American Meteorological Society, 2016, 2016, 1177-1179.	3.3	0