Richard Seager

List of Publications by Year
in descending order

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119 papers	18,620 citations	18482 62 h-index	19749 117 g-index
121 all docs	121 docs citations	121 times ranked	15310 citing authors

#	Article	IF	Citations
1	Model Projections of an Imminent Transition to a More Arid Climate in Southwestern North America. Science, 2007, 316, 1181-1184.	12.6	1,792
2	Temperature as a potent driver of regional forest drought stress and tree mortality. Nature Climate Change, 2013, 3, 292-297.	18.8	1,487
3	Climate change in the Fertile Crescent and implications of the recent Syrian drought. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3241-3246.	7.1	959
4	Global warming and 21st century drying. Climate Dynamics, 2014, 43, 2607-2627.	3.8	782
5	North American drought: Reconstructions, causes, and consequences. Earth-Science Reviews, 2007, 81, 93-134.	9.1	677
6	Thermodynamic and Dynamic Mechanisms for Large-Scale Changes in the Hydrological Cycle in Response to Global Warming*. Journal of Climate, 2010, 23, 4651-4668.	3.2	668
7	Forced and Internal Twentieth-Century SST Trends in the North Atlantic*. Journal of Climate, 2009, 22, 1469-1481.	3.2	493
8	An Ocean Dynamical Thermostat. Journal of Climate, 1996, 9, 2190-2196.	3.2	492
9	Contribution of anthropogenic warming to California drought during 2012â€“2014. Geophysical Research Letters, 2015, 42, 6819-6828.	4.0	464
10	Twentieth-Century Sea Surface Temperature Trends. Science, 1997, 275, 957-960.	12.6	443
11	Greenhouse warming and the 21st century hydroclimate of southwestern North America. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 21277-21282.	7.1	433
12	Old World megadroughts and pluvials during the Common Era. Science Advances, 2015, 1, e1500561.	10.3	403
13	Megadroughts in North America: placing IPCC projections of hydroclimatic change in a longâ€term palaeoclimate context. Journal of Quaternary Science, 2010, 25, 48-61.	2.1	392
14	Modeling of Tropical Forcing of Persistent Droughts and Pluvials over Western North America: 1856â€“2000*. Journal of Climate, 2005, 18, 4065-4088.	3.2	376
15	Mechanisms of Hemispherically Symmetric Climate Variability*. Journal of Climate, 2003, 16, 2960-2978.	3.2	330
16	Causes of the 2011â€“14 California Drought*. Journal of Climate, 2015, 28, 6997-7024.	3.2	317
17	Amplification of the North American â€œDust Bowlâ€•drought through human-induced land degradation. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 4997-5001.	7.1	284
18	Drought in the Southeastern United States: Causes, Variability over the Last Millennium, and the Potential for Future Hydroclimate Change*. Journal of Climate, 2009, 22, 5021-5045.	3.2	283

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19	A U.S. CLIVAR Project to Assess and Compare the Responses of Global Climate Models to Drought-Related SST Forcing Patterns: Overview and Results. Journal of Climate, 2009, 22, 5251-5272.	3.2	282
20	Projections of declining surface-water availability for the southwestern United States. Nature Climate Change, 2013, 3, 482-486.	18.8	280
21	Strengthening tropical Pacific zonal sea surface temperature gradient consistent with rising greenhouse gases. Nature Climate Change, 2019, 9, 517-522.	18.8	270
22	North American Climate in CMIP5 Experiments: Part III: Assessment of Twenty-First-Century Projections*. Journal of Climate, 2014, 27, 2230-2270.	3.2	231
23	North American Droughts of the Last Millennium from a Gridded Network of Tree-Ring Data. Journal of Climate, 2007, 20, 1353-1376.	3.2	207
24	Wind-Driven Shifts in the Latitude of the Kuroshioâ€“Oyashio Extension and Generation of SST Anomalies on Decadal Timescales*. Journal of Climate, 2001, 14, 4249-4265.	3.2	206
25	The Turn of the Century North American Drought: Global Context, Dynamics, and Past Analogs*. Journal of Climate, 2007, 20, 5527-5552.	3.2	206
26	Mechanisms of Tropical Atlantic SST Influence on North American Precipitation Variability*. Journal of Climate, 2010, 23, 5610-5628.	3.2	184
27	Robust features of Atlantic multi-decadal variability and its climate impacts. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	179
28	Atmosphere and Ocean Origins of North American Droughts*. Journal of Climate, 2014, 27, 4581-4606.	3.2	176
29	Blueprints for Medieval hydroclimate. Quaternary Science Reviews, 2007, 26, 2322-2336.	3.0	173
30	The Annual Cycle of East African Precipitation. Journal of Climate, 2015, 28, 2385-2404.	3.2	173
31	The East African Long Rains in Observations and Models. Journal of Climate, 2014, 27, 7185-7202.	3.2	168
32	A Diagnosis of the Seasonally and Longitudinally Varying Midlatitude Circulation Response to Global Warming*. Journals of the Atmospheric Sciences, 2014, 71, 2489-2515.	1.7	157
33	Pan-Continental Droughts in North America over the Last Millennium*. Journal of Climate, 2014, 27, 383-397.	3.2	155
34	Causes of Atlantic Ocean Climate Variability between 1958 and 1998*. Journal of Climate, 2000, 13, 2845-2862.	3.2	153
35	Climatology, Variability, and Trends in the U.S. Vapor Pressure Deficit, an Important Fire-Related Meteorological Quantity. Journal of Applied Meteorology and Climatology, 2015, 54, 1121-1141.	1.5	150
36	North American droughts of the mid to late nineteenth century: a history, simulation and implication for Mediaeval drought. Holocene, 2006, 16, 159-171.	1.7	147

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37	Diagnostic Computation of Moisture Budgets in the ERA-Interim Reanalysis with Reference to Analysis of CMIP-Archived Atmospheric Model Data*. Journal of Climate, 2013, 26, 7876-7901.	3.2	146
38	Observed Strengthening of the Zonal Sea Surface Temperature Gradient across the Equatorial Pacific Ocean*. Journal of Climate, 2009, 22, 4316-4321.	3.2	141
39	Causes of Increasing Aridification of the Mediterranean Region in Response to Rising Greenhouse Gases*. Journal of Climate, 2014, 27, 4655-4676.	3.2	137
40	Climate Variability and Change of Mediterranean-Type Climates. Journal of Climate, 2019, 32, 2887-2915.	3.2	132
41	Mid-latitude freshwater availability reduced by projected vegetation responses to climate change. Nature Geoscience, 2019, 12, 983-988.	12.9	132
42	Does Global Warming Cause Intensified Interannual Hydroclimate Variability?. Journal of Climate, 2012, 25, 3355-3372.	3.2	129
43	A model of the tropical Pacific sea surface temperature climatology. Journal of Geophysical Research, 1988, 93, 1265-1280.	3.3	126
44	Is an Epic Pluvial Masking the Water Insecurity of the Greater New York City Region?*,+. Journal of Climate, 2013, 26, 1339-1354.	3.2	126
45	Dynamical and Thermodynamical Causes of Large-Scale Changes in the Hydrological Cycle over North America in Response to Global Warming*. Journal of Climate, 2014, 27, 7921-7948.	3.2	124
46	North American megadroughts in the Common Era: reconstructions and simulations. Wiley Interdisciplinary Reviews: Climate Change, 2016, 7, 411-432.	8.1	123
47	Causes of change in Northern Hemisphere winter meridional winds and regional hydroclimate. Nature Climate Change, 2016, 6, 65-70.	18.8	108
48	Changes in storm tracks and energy transports in a warmer climate simulated by the GFDL CM2.1 model. Climate Dynamics, 2011, 37, 53-72.	3.8	104
49	Dynamical Causes of the 2010/11 Texasâ€“Northern Mexico Drought*. Journal of Hydrometeorology, 2014, 15, 39-68.	1.9	101
50	Would Advance Knowledge of 1930s SSTs Have Allowed Prediction of the Dust Bowl Drought?*. Journal of Climate, 2008, 21, 3261-3281.	3.2	94
51	The worst North American drought year of the last millennium: 1934. Geophysical Research Letters, 2014, 41, 7298-7305.	4.0	86
52	Tropical Oceanic Causes of Interannual to Multidecadal Precipitation Variability in Southeast South America over the Past Century*. Journal of Climate, 2010, 23, 5517-5539.	3.2	81
53	Tropical Pacific Forcing of North American Medieval Megadroughts: Testing the Concept with an Atmosphere Model Forced by Coral-Reconstructed SSTs*. Journal of Climate, 2008, 21, 6175-6190.	3.2	77
54	Dynamical Structure of Extreme Floods in the U.S. Midwest and the United Kingdom. Journal of Hydrometeorology, 2013, 14, 485-504.	1.9	76

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55	The Curious Case of Projected Twenty-First-Century Drying but Greening in the American West. Journal of Climate, 2017, 30, 8689-8710.	3.2	74
56	Are Glacials Dry? Consequences for Paleoclimatology and for Greenhouse Warming. Journal of Climate, 2017, 30, 6593-6609.	3.2	73
57	Early 21stâ€Century Drought in Mexico. Eos, 2009, 90, 89-90.	0.1	71
58	The relative contributions of radiative forcing and internal climate variability to the late 20th Century winter drying of the Mediterranean region. Climate Dynamics, 2012, 38, 2001-2015.	3.8	69
59	Are Simulated Megadroughts in the North American Southwest Forced?*. Journal of Climate, 2015, 28, 124-142.	3.2	68
60	The 1960s Drought and the Subsequent Shift to a Wetter Climate in the Catskill Mountains Region of the New York City Watershed*. Journal of Climate, 2012, 25, 6721-6742.	3.2	67
61	Dust and sea surface temperature forcing of the 1930s â€œDust Bowlâ€•drought. Geophysical Research Letters, 2008, 35, .	4.0	66
62	Causes and Implications of Extreme Atmospheric Moisture Demand during the Record-Breaking 2011 Wildfire Season in the Southwestern United States. Journal of Applied Meteorology and Climatology, 2014, 53, 2671-2684.	1.5	65
63	The 1976/77 transition in precipitation over the Americas and the influence of tropical sea surface temperature. Climate Dynamics, 2005, 24, 721-740.	3.8	64
64	Stratospheric ozone depletion: a key driver of recent precipitation trends in South Eastern South America. Climate Dynamics, 2014, 42, 1775-1792.	3.8	62
65	The Rainfall Annual Cycle Bias over East Africa in CMIP5 Coupled Climate Models. Journal of Climate, 2015, 28, 9789-9802.	3.2	58
66	Megadroughts in Southwestern North America in ECHO-G Millennial Simulations and Their Comparison to Proxy Drought Reconstructions*. Journal of Climate, 2013, 26, 7635-7649.	3.2	55
67	The global footprint of persistent extraâ€tropical drought in the instrumental era. International Journal of Climatology, 2008, 28, 1761-1774.	3.5	50
68	The 2016 Southeastern U.S. Drought: An Extreme Departure From Centennial Wetting and Cooling. Journal of Geophysical Research D: Atmospheres, 2017, 122, 10888-10905.	3.3	48
69	On the Causes and Dynamics of the Early Twentieth-Century North American Pluvial. Journal of Climate, 2011, 24, 5043-5060.	3.2	46
70	North American Pancontinental Droughts in Model Simulations of the Last Millennium*. Journal of Climate, 2015, 28, 2025-2043.	3.2	46
71	Precipitation, Temperature, and Teleconnection Signals across the Combined North American, Monsoon Asia, and Old World Drought Atlases. Journal of Climate, 2017, 30, 7141-7155.	3.2	46
72	Blue Water Tradeâ€Offs With Vegetation in a CO₂â€Enriched Climate. Geophysical Research Letters, 2018, 45, 3115-3125.	4.0	46

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73	Oceanic and radiative forcing of medieval megadroughts in the American Southwest. Science Advances, 2019, 5, eaax0087.	10.3	45
74	Forced and unforced variability of twentieth century North American droughts and pluvials. Climate Dynamics, 2011, 37, 1097-1110.	3.8	44
75	Intensification of North American Megadroughts through Surface and Dust Aerosol Forcing*. Journal of Climate, 2013, 26, 4414-4430.	3.2	44
76	A Mechanisms-Based Approach to Detecting Recent Anthropogenic Hydroclimate Change*. Journal of Climate, 2012, 25, 236-261.	3.2	41
77	A Pacific Centennial Oscillation Predicted by Coupled GCMs*. Journal of Climate, 2012, 25, 5943-5961.	3.2	41
78	Investigating the Causes of Increased Twentieth-Century Fall Precipitation over the Southeastern United States. Journal of Climate, 2019, 32, 575-590.	3.2	41
79	Persistent Discrepancies between Observed and Modeled Trends in the Tropical Pacific Ocean. Journal of Climate, 2022, 35, 4571-4584.	3.2	39
80	Mechanism of Future Spring Drying in the Southwestern United States in CMIP5 Models. Journal of Climate, 2018, 31, 4265-4279.	3.2	35
81	The Downward Influence of Uncertainty in the Northern Hemisphere Stratospheric Polar Vortex Response to Climate Change. Journal of Climate, 2018, 31, 6371-6391.	3.2	35
82	The improbable but unexceptional occurrence of megadrought clustering in the American West during the Medieval Climate Anomaly. Environmental Research Letters, 2016, 11, 074025.	5.2	34
83	Commentary on the Syria case: Climate as a contributing factor. Political Geography, 2017, 60, 245-247.	2.5	32
84	Decadal Drought Variability Over North America: Mechanisms and Predictability. Current Climate Change Reports, 2017, 3, 141-149.	8.6	31
85	Role of tropical Pacific SSTs in global medieval hydroclimate: A modeling study. Geophysical Research Letters, 2010, 37, .	4.0	28
86	The Importance of the Montreal Protocol in Protecting Earthâ€™s Hydroclimate. Journal of Climate, 2013, 26, 4049-4068.	3.2	28
87	Predictability of Tropical Pacific Decadal Variability in an Intermediate Model*. Journal of Climate, 2004, 17, 2842-2850.	3.2	27
88	Dynamical and Thermodynamic Elements of Modeled Climate Change at the East African Margin of Convection. Geophysical Research Letters, 2018, 45, 992-1000.	4.0	27
89	Revisiting the Leading Drivers of Pacific Coastal Drought Variability in the Contiguous United States. Journal of Climate, 2018, 31, 25-43.	3.2	27
90	Whither the 100th Meridian? The Once and Future Physical and Human Geography of Americaâ€™s Aridâ€“Humid Divide. Part I: The Story So Far. Earth Interactions, 2018, 22, 1-22.	1.5	26

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91	Increased Fall Precipitation in the Southeastern United States Driven by Higherâ€Intensity, Frontal Precipitation. Geophysical Research Letters, 2019, 46, 8300-8309.	4.0	26
92	Mechanisms of Winter Precipitation Variability in the Europeanâ€“Mediterranean Region Associated with the North Atlantic Oscillation. Journal of Climate, 2020, 33, 7179-7196.	3.2	26
93	Life cycles of agriculturally relevant <scp>ENSO</scp> teleconnections in North and South America. International Journal of Climatology, 2017, 37, 3297-3318.	3.5	23
94	Climate Change Amplification of Natural Drought Variability: The Historic Mid-Twentieth-Century North American Drought in a Warmer World. Journal of Climate, 2019, 32, 5417-5436.	3.2	23
95	Whither the 100th Meridian? The Once and Future Physical and Human Geography of Americaâ€™s Aridâ€“Humid Divide. Part II: The Meridian Moves East. Earth Interactions, 2018, 22, 1-24.	1.5	21
96	Western boundary currents and climate change. Journal of Geophysical Research: Oceans, 2016, 121, 7212-7214.	2.6	18
97	A Simple Model of the Climatology and Variability of the Low-Level Wind Field in the Tropics. Journal of Climate, 1991, 4, 164-179.	3.2	17
98	Divergent Regional Climate Consequences of Maintaining Current Irrigation Rates in the 21st Century. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031814.	3.3	17
99	ENSO-driven coupled megadroughts in North and South America over the last millennium. Nature Geoscience, 2021, 14, 739-744.	12.9	14
100	Intermodel Spread in the Northern Hemisphere Stratospheric Polar Vortex Response to Climate Change in the CMIP5 Models. Geophysical Research Letters, 2019, 46, 13290-13298.	4.0	11
101	Covariability of climate and streamflow in the Upper Rio Grande from interannual to interdecadal timescales. Journal of Hydrology: Regional Studies, 2017, 13, 58-71.	2.4	10
102	Pacific Ocean Forcing and Atmospheric Variability Are the Dominant Causes of Spatially Widespread Droughts in the Contiguous United States. Journal of Geophysical Research D: Atmospheres, 2019, 124, 2507-2524.	3.3	10
103	Comparing Twentieth- and Twenty-First-Century Patterns of Interannual Precipitation Variability over the Western United States and Northern Mexico*. Journal of Hydrometeorology, 2012, 13, 366-378.	1.9	9
104	Causes of interannual to decadal variability of Gila River streamflow over the past century. Journal of Hydrology: Regional Studies, 2015, 3, 494-508.	2.4	9
105	Categorical representation of North American precipitation projections. Scientific Reports, 2016, 6, 23888.	3.3	8
106	Predictability and prediction of persistent cool states of the Tropical Pacific Ocean. Climate Dynamics, 2017, 49, 2291-2307.	3.8	8
107	Oceanic Drivers of Widespread Summer Droughts in the United States Over the Common Era. Geophysical Research Letters, 2019, 46, 8271-8280.	4.0	8
108	Framing the frame: Cause and effect in climate-related migration. World Development, 2022, 158, 106016.	4.9	7

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109	Disentangling the Regional Climate Impacts of Competing Vegetation Responses to Elevated Atmospheric CO 2. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034108.	3.3	6
110	Placing the east-west North American aridity gradient in a multi-century context. Environmental Research Letters, 2021, 16, 114043.	5.2	6
111	Decadal Hydroclimate Variability Across the Americas. World Scientific Series on Asia-Pacific Weather and Climate, 2015, , 235-254.	0.2	5
112	Future Summer Drying in the U.S. Corn Belt and the Role of Midlatitude Storm Tracks. Journal of Climate, 2021, , 1-33.	3.2	5
113	Dynamics and Variability of the Spring Dry Season in the United States Southwest as Observed in AmeriFlux and NLDAS-2 Data. Journal of Hydrometeorology, 2019, 20, 1081-1102.	1.9	4
114	Prediction of Seasonal Meteorological Drought Onset and Termination over the Southern Great Plains in the North American Multimodel Ensemble. Journal of Hydrometeorology, 2020, 21, 2237-2255.	1.9	4
115	A quantitative hydroclimatic context for the European Great Famine of 1315â€“1317. Communications Earth & Environment, 2020, 1, .	6.8	3
116	Quantifying atmosphere and ocean origins of North American precipitation variability. Climate Dynamics, 2021, 56, 4051-4074.	3.8	3
117	Observational analysis of decadal and long-term hydroclimate drivers in the Mediterranean region: role of the oceanâ€“atmosphere system and anthropogenic forcing. Climate Dynamics, 0, , 1.	3.8	3
118	How Does Sea Surface Temperature Drive the Intertropical Convergence Zone in the Southern Indian Ocean?. Journal of Climate, 2022, 35, 5415-5432.	3.2	1
119	Changing hydroclimate dynamics and the 19th to 20th century wetting trend in the English Channel region of northwest Europe. Climate Dynamics, 2022, 58, 1539-1553.	3.8	0