

Gerald A Meehl

List of Publications by Year in descending order

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141
papers

51,055
citations

9264

74
h-index

10158

140
g-index

148
all docs

148
docs citations

148
times ranked

33524
citing authors

#	ARTICLE	IF	CITATIONS
1	A modulation of the mechanism of the semiannual oscillation in the Southern Hemisphere. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 2022, 50, 442.	1.7	39
2	The effects of bias, drift, and trends in calculating anomalies for evaluating skill of seasonal-to-decadal initialized climate predictions. <i>Climate Dynamics</i> , 2022, 59, 3373-3389.	3.8	8
3	Atlantic and Pacific tropics connected by mutually interactive decadal-timescale processes. <i>Nature Geoscience</i> , 2021, 14, 36-42.	12.9	76
4	Climate model projections from the Scenario Model Intercomparison Project (ScenarioMIP) of CMIP6. <i>Earth System Dynamics</i> , 2021, 12, 253-293.	7.1	236
5	Shortened Duration of Global Warming Slowdowns with Elevated Greenhouse Gas Emissions. <i>Journal of Meteorological Research</i> , 2021, 35, 225-237.	2.4	8
6	Initialized Earth System prediction from subseasonal to decadal timescales. <i>Nature Reviews Earth & Environment</i> , 2021, 2, 340-357.	29.7	85
7	The role of interannual ENSO events in decadal timescale transitions of the Interdecadal Pacific Oscillation. <i>Climate Dynamics</i> , 2021, 57, 1933-1951.	3.8	16
8	The influence of variability in meridional over turning on global ocean circulation. <i>Journal of Climate</i> , 2021, , 1-53.	3.2	1
9	Tropical teleconnection impacts on Antarctic climate changes. <i>Nature Reviews Earth & Environment</i> , 2021, 2, 680-698.	29.7	85
10	Diverse impacts of Indian Ocean Dipole on El Niño-Southern Oscillation. <i>Journal of Climate</i> , 2021, , 1-46.	3.2	0
11	A Data Set for Intercomparing the Transient Behavior of Dynamical Model-Based Subseasonal to Decadal Climate Predictions. <i>Journal of Advances in Modeling Earth Systems</i> , 2021, 13, e2021MS002570.	3.8	5
12	Decadal climate variability in the tropical Pacific: Characteristics, causes, predictability, and prospects. <i>Science</i> , 2021, 374, eaay9165.	12.6	92
13	The Role of Coupled Feedbacks in the Decadal Variability of the Southern Hemisphere Eddy-Driven Jet. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2021JD035023.	3.3	3
14	Quantifying Progress Across Different CMIP Phases With the ESMValTool. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2019JD032321.	3.3	50
15	Characteristics of Future Warmer Base States in CESM2. <i>Earth and Space Science</i> , 2020, 7, e2020EA001296.	2.6	14
16	A joint role for forced and internally-driven variability in the decadal modulation of global warming. <i>Nature Communications</i> , 2020, 11, 3827.	12.8	15
17	Role of Tropical Variability in Driving Decadal Shifts in the Southern Hemisphere Summertime Eddy-Driven Jet. <i>Journal of Climate</i> , 2020, 33, 5445-5463.	3.2	27
18	Context for interpreting equilibrium climate sensitivity and transient climate response from the CMIP6 Earth system models. <i>Science Advances</i> , 2020, 6, eaba1981.	10.3	321

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19	Intraseasonal, Seasonal, and Interannual Characteristics of Regional Monsoon Simulations in CESM2. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2019MS001962.	3.8	17
20	Flash droughts present a new challenge for subseasonal-to-seasonal prediction. <i>Nature Climate Change</i> , 2020, 10, 191-199.	18.8	210
21	Progress in Simulating the Quasi-Biennial Oscillation in CMIP Models. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2019JD032362.	3.3	59
22	Substantial Increase in the Joint Occurrence and Human Exposure of Heatwave and High-PM Hazards Over South Asia in the Mid-21st Century. <i>AGU Advances</i> , 2020, 1, e2019AV000103.	5.4	31
23	Climate Change and Impacts on Variability and Interactions. , 2020, , 293-337.		0
24	Indian Ocean Warming Trend Reduces Pacific Warming Response to Anthropogenic Greenhouse Gases: An Interbasin Thermostat Mechanism. <i>Geophysical Research Letters</i> , 2019, 46, 10882-10890.	4.0	64
25	Effects of Model Resolution, Physics, and Coupling on Southern Hemisphere Storm Tracks in CESM1.3. <i>Geophysical Research Letters</i> , 2019, 46, 12408-12416.	4.0	39
26	Taking climate model evaluation to the next level. <i>Nature Climate Change</i> , 2019, 9, 102-110.	18.8	407
27	Sustained ocean changes contributed to sudden Antarctic sea ice retreat in late 2016. <i>Nature Communications</i> , 2019, 10, 14.	12.8	179
28	Future heat waves and surface ozone. <i>Environmental Research Letters</i> , 2018, 13, 064004.	5.2	50
29	Tropical Decadal Variability and the Rate of Arctic Sea Ice Decrease. <i>Geophysical Research Letters</i> , 2018, 45, 11,326.	4.0	51
30	Predicted Chance That Global Warming Will Temporarily Exceed 1.5°C. <i>Geophysical Research Letters</i> , 2018, 45, 11,895.	4.0	31
31	Predicting Near-Term Changes in the Earth System: A Large Ensemble of Initialized Decadal Prediction Simulations Using the Community Earth System Model. <i>Bulletin of the American Meteorological Society</i> , 2018, 99, 1867-1886.	3.3	166
32	Multi-Decadal Trend and Decadal Variability of the Regional Sea Level over the Indian Ocean since the 1960s: Roles of Climate Modes and External Forcing. <i>Climate</i> , 2018, 6, 51.	2.8	34
33	Extreme weather and climate events with ecological relevance: a review. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2017, 372, 20160135.	4.0	467
34	Decadal Variability of the Indian and Pacific Walker Cells since the 1960s: Do They Covary on Decadal Time Scales?. <i>Journal of Climate</i> , 2017, 30, 8447-8468.	3.2	33
35	Spatial and temporal agreement in climate model simulations of the Interdecadal Pacific Oscillation. <i>Environmental Research Letters</i> , 2017, 12, 044011.	5.2	65
36	A 2 Year Forecast for a 60-80% Chance of La Niña in 2017-2018. <i>Geophysical Research Letters</i> , 2017, 44, 11,624.	4.0	37

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37	The role of the Southern Hemisphere semiannual oscillation in the development of a precursor to central and eastern Pacific Southern Oscillation warm events. <i>Geophysical Research Letters</i> , 2017, 44, 6959-6965.	4.0	10
38	CMIP5 Scientific Gaps and Recommendations for CMIP6. <i>Bulletin of the American Meteorological Society</i> , 2017, 98, 95-105.	3.3	207
39	Spatial Patterns of Sea Level Variability Associated with Natural Internal Climate Modes. <i>Surveys in Geophysics</i> , 2017, 38, 217-250.	4.6	71
40	Towards improved and more routine Earth system model evaluation in CMIP. <i>Earth System Dynamics</i> , 2016, 7, 813-830.	7.1	74
41	The Scenario Model Intercomparison Project (ScenarioMIP) for CMIP6. <i>Geoscientific Model Development</i> , 2016, 9, 3461-3482.	3.6	2,084
42	Overview of the Coupled Model Intercomparison Project Phase 6 (CMIP6) experimental design and organization. <i>Geoscientific Model Development</i> , 2016, 9, 1937-1958.	3.6	5,303
43	The Decadal Climate Prediction Project (DCPP) contribution to CMIP6. <i>Geoscientific Model Development</i> , 2016, 9, 3751-3777.	3.6	282
44	Aspen Global Change Institute: 25 Years of Interdisciplinary Global Change Science. <i>Bulletin of the American Meteorological Society</i> , 2016, 97, 2027-2037.	3.3	0
45	Antarctic sea-ice expansion between 2000 and 2014 driven by tropical Pacific decadal climate variability. <i>Nature Geoscience</i> , 2016, 9, 590-595.	12.9	218
46	Future changes in regional precipitation simulated by a half-degree coupled climate model: Sensitivity to horizontal resolution. <i>Journal of Advances in Modeling Earth Systems</i> , 2016, 8, 863-884.	3.8	31
47	Contribution of the Interdecadal Pacific Oscillation to twentieth-century global surface temperature trends. <i>Nature Climate Change</i> , 2016, 6, 1005-1008.	18.8	156
48	US daily temperature records past, present, and future. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 13977-13982.	7.1	32
49	Tropical Pacific SST Drivers of Recent Antarctic Sea Ice Trends. <i>Journal of Climate</i> , 2016, 29, 8931-8948.	3.2	82
50	Initialized decadal prediction for transition to positive phase of the Interdecadal Pacific Oscillation. <i>Nature Communications</i> , 2016, 7, 11718.	12.8	143
51	Making sense of the early-2000s warming slowdown. <i>Nature Climate Change</i> , 2016, 6, 224-228.	18.8	333
52	Impact of solar panels on global climate. <i>Nature Climate Change</i> , 2016, 6, 290-294.	18.8	91
53	How sensitive are the Pacific tropical North Atlantic teleconnections to the position and intensity of El Niño-related warming?. <i>Climate Dynamics</i> , 2016, 46, 1841-1860.	3.8	69
54	Effects of the Mount Pinatubo eruption on decadal climate prediction skill of Pacific sea surface temperatures. <i>Geophysical Research Letters</i> , 2015, 42, 10,840.	4.0	18

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55	Disappearance of the southeast U.S. "warming hole" with the late 1990s transition of the Interdecadal Pacific Oscillation. <i>Geophysical Research Letters</i> , 2015, 42, 5564-5570.	4.0	48
56	Early twentieth-century warming linked to tropical Pacific wind strength. <i>Nature Geoscience</i> , 2015, 8, 117-121.	12.9	56
57	Twenty-Five Years of Interdisciplinary Global Change Science. <i>Eos</i> , 2014, 95, 478-478.	0.1	1
58	Regional precipitation simulations for the mid-1970s shift and early-2000s hiatus. <i>Geophysical Research Letters</i> , 2014, 41, 7658-7665.	4.0	30
59	Climate Model Intercomparisons: Preparing for the Next Phase. <i>Eos</i> , 2014, 95, 77-78.	0.1	129
60	CMIP5 Climate Model Analyses: Climate Extremes in the United States. <i>Bulletin of the American Meteorological Society</i> , 2014, 95, 571-583.	3.3	270
61	Decadal Climate Prediction: An Update from the Trenches. <i>Bulletin of the American Meteorological Society</i> , 2014, 95, 243-267.	3.3	454
62	Recent intensification of wind-driven circulation in the Pacific and the ongoing warming hiatus. <i>Nature Climate Change</i> , 2014, 4, 222-227.	18.8	1,115
63	Interactions between externally forced climate signals from sunspot peaks and the internally generated Pacific Decadal and North Atlantic Oscillations. <i>Geophysical Research Letters</i> , 2014, 41, 161-166.	4.0	20
64	Climate model simulations of the observed early-2000s hiatus of global warming. <i>Nature Climate Change</i> , 2014, 4, 898-902.	18.8	215
65	Intensification of decadal and multi-decadal sea level variability in the western tropical Pacific during recent decades. <i>Climate Dynamics</i> , 2014, 43, 1357-1379.	3.8	173
66	CMIP5 multi-model hindcasts for the mid-1970s shift and early 2000s hiatus and predictions for 2016-2035. <i>Geophysical Research Letters</i> , 2014, 41, 1711-1716.	4.0	65
67	Externally Forced and Internally Generated Decadal Climate Variability Associated with the Interdecadal Pacific Oscillation. <i>Journal of Climate</i> , 2013, 26, 7298-7310.	3.2	405
68	Influence of Continental Ice Retreat on Future Global Climate. <i>Journal of Climate</i> , 2013, 26, 3087-3111.	3.2	22
69	A verification framework for interannual-to-decadal predictions experiments. <i>Climate Dynamics</i> , 2013, 40, 245-272.	3.8	254
70	Could a future "Grand Solar Minimum" like the Maunder Minimum stop global warming?. <i>Geophysical Research Letters</i> , 2013, 40, 1789-1793.	4.0	39
71	Climate Change Projections in CESM1(CAM5) Compared to CCSM4. <i>Journal of Climate</i> , 2013, 26, 6287-6308.	3.2	243
72	Mechanisms Contributing to the Warming Hole and the Consequent U.S. East-West Differential of Heat Extremes. <i>Journal of Climate</i> , 2012, 25, 6394-6408.	3.2	136

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73	Monsoon Regimes and Processes in CCSM4. Part I: The Asianâ€Australian Monsoon. Journal of Climate, 2012, 25, 2583-2608.	3.2	57
74	The Indian summer monsoon during peaks in the 11 year sunspot cycle. Geophysical Research Letters, 2012, 39, .	4.0	20
75	Monsoon Regimes and Processes in CCSM4. Part II: African and American Monsoon Systems. Journal of Climate, 2012, 25, 2609-2621.	3.2	42
76	An Overview of CMIP5 and the Experiment Design. Bulletin of the American Meteorological Society, 2012, 93, 485-498.	3.3	11,448
77	The Pacificâ€Atlantic seesaw and the Bering Strait. Geophysical Research Letters, 2012, 39, .	4.0	39
78	Case studies for initialized decadal hindcasts and predictions for the Pacific region. Geophysical Research Letters, 2012, 39, .	4.0	56
79	Relating the strength of the tropospheric biennial oscillation (TBO) to the phase of the Interdecadal Pacific Oscillation (IPO). Geophysical Research Letters, 2012, 39, .	4.0	26
80	Climate System Response to External Forcings and Climate Change Projections in CCSM4. Journal of Climate, 2012, 25, 3661-3683.	3.2	241
81	The average influence of decadal solar forcing on the atmosphere in the South Pacific region. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	16
82	Model-based evidence of deep-ocean heat uptake during surface-temperature hiatus periods. Nature Climate Change, 2011, 1, 360-364.	18.8	610
83	Decadal Variability of Asianâ€Australian Monsoonâ€ENSOâ€TBO Relationships. Journal of Climate, 2011, 24, 4925-4940.	3.2	53
84	Improving Societal Outcomes of Extreme Weather in a Changing Climate: An Integrated Perspective. Annual Review of Environment and Resources, 2011, 36, 1-25.	13.4	172
85	The next generation of scenarios for climate change research and assessment. Nature, 2010, 463, 747-756.	27.8	5,299
86	Influence of Bering Strait flow and North Atlantic circulation on glacial sea-level changes. Nature Geoscience, 2010, 3, 118-121.	12.9	140
87	Patterns of Indian Ocean sea-level change in a warming climate. Nature Geoscience, 2010, 3, 546-550.	12.9	203
88	Decadal Prediction in the Pacific Region. Journal of Climate, 2010, 23, 2959-2973.	3.2	71
89	Climate engineering through artificial enhancement of natural forcings: Magnitudes and implied consequences. Journal of Geophysical Research, 2010, 115, .	3.3	29
90	SOLAR INFLUENCES ON CLIMATE. Reviews of Geophysics, 2010, 48, .	23.0	1,014

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91	Decadal Prediction. Bulletin of the American Meteorological Society, 2009, 90, 1467-1486.	3.3	662
92	A Unified Modeling Approach to Climate System Prediction. Bulletin of the American Meteorological Society, 2009, 90, 1819-1832.	3.3	140
93	A Lagged Warm Eventâ€œLike Response to Peaks in Solar Forcing in the Pacific Region. Journal of Climate, 2009, 22, 3647-3660.	3.2	69
94	Amplifying the Pacific Climate System Response to a Small 11-Year Solar Cycle Forcing. Science, 2009, 325, 1114-1118.	12.6	373
95	Transient response of the MOC and climate to potential melting of the Greenland Ice Sheet in the 21st century. Geophysical Research Letters, 2009, 36, .	4.0	93
96	Relative increase of record high maximum temperatures compared to record low minimum temperatures in the U.S.. Geophysical Research Letters, 2009, 36, .	4.0	281
97	Effect of the Atlantic hurricanes on the oceanic meridional overturning circulation and heat transport. Geophysical Research Letters, 2009, 36, .	4.0	30
98	The Mid-1970s Climate Shift in the Pacific and the Relative Roles of Forced versus Inherent Decadal Variability. Journal of Climate, 2009, 22, 780-792.	3.2	203
99	The response in the Pacific to the sun's decadal peaks and contrasts to cold events in the Southern Oscillation. Journal of Atmospheric and Solar-Terrestrial Physics, 2008, 70, 1046-1055.	1.6	64
100	A Coupled Airâ€œSea Response Mechanism to Solar Forcing in the Pacific Region. Journal of Climate, 2008, 21, 2883-2897.	3.2	181
101	Response of Thermohaline Circulation to Freshwater Forcing under Present-Day and LGM Conditions. Journal of Climate, 2008, 21, 2239-2258.	3.2	70
102	Spatial patterns of probabilistic temperature change projections from a multivariate Bayesian analysis. Geophysical Research Letters, 2007, 34, .	4.0	56
103	THE WCRP CMIP3 Multimodel Dataset: A New Era in Climate Change Research. Bulletin of the American Meteorological Society, 2007, 88, 1383-1394.	3.3	2,484
104	Role of the Bering Strait in the thermohaline circulation and abrupt climate change. Geophysical Research Letters, 2007, 34, .	4.0	45
105	Coupled air-sea response to solar forcing in the Pacific region during northern winter. Journal of Geophysical Research, 2007, 112, .	3.3	147
106	Contributions of natural and anthropogenic forcing to changes in temperature extremes over the United States. Geophysical Research Letters, 2007, 34, .	4.0	89
107	Multi-model changes in El NiÃ±o teleconnections over North America in a future warmer climate. Climate Dynamics, 2007, 29, 779-790.	3.8	90
108	Interpretation of tropical thermocline cooling in the Indian and Pacific oceans during recent decades. Geophysical Research Letters, 2006, 33, .	4.0	45

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109	Spatiotemporal Structures and Mechanisms of the Tropospheric Biennial Oscillation in the Indo-Pacific Warm Ocean Regions*. <i>Journal of Climate</i> , 2006, 19, 3070-3087.	3.2	75
110	Megadroughts in the Indian Monsoon Region and Southwest North America and a Mechanism for Associated Multidecadal Pacific Sea Surface Temperature Anomalies. <i>Journal of Climate</i> , 2006, 19, 1605-1623.	3.2	237
111	Going to the Extremes. <i>Climatic Change</i> , 2006, 79, 185-211.	3.6	966
112	Climate Change Projections for the Twenty-First Century and Climate Change Commitment in the CCSM3. <i>Journal of Climate</i> , 2006, 19, 2597-2616.	3.2	239
113	Monsoon Regimes in the CCSM3. <i>Journal of Climate</i> , 2006, 19, 2482-2495.	3.2	79
114	Contributions of External Forcings to Southern Annular Mode Trends. <i>Journal of Climate</i> , 2006, 19, 2896-2905.	3.2	441
115	Bering Strait throughflow and the thermohaline circulation. <i>Geophysical Research Letters</i> , 2005, 32, .	4.0	32
116	Reasons for a fresher northern North Atlantic in the late 20th century. <i>Geophysical Research Letters</i> , 2005, 32, .	4.0	5
117	More Intense, More Frequent, and Longer Lasting Heat Waves in the 21st Century. <i>Science</i> , 2004, 305, 994-997.	12.6	3,162
118	Combinations of Natural and Anthropogenic Forcings in Twentieth-Century Climate. <i>Journal of Climate</i> , 2004, 17, 3721-3727.	3.2	248
119	Changes in frost days in simulations of twentyfirst century climate. <i>Climate Dynamics</i> , 2004, 23, 495-511.	3.8	94
120	A decadal solar effect in the tropics in July–August. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2004, 66, 1767-1778.	1.6	98
121	Detecting thermohaline circulation changes from ocean properties in a coupled model. <i>Geophysical Research Letters</i> , 2004, 31, n/a-n/a.	4.0	21
122	The Southern Oscillation in the Early 1990s. <i>Geophysical Research Letters</i> , 2003, 30, .	4.0	13
123	A monthly and latitudinally varying volcanic forcing dataset in simulations of 20th century climate. <i>Geophysical Research Letters</i> , 2003, 30, .	4.0	296
124	Contributions of Anthropogenic and Natural Forcing to Recent Tropopause Height Changes. <i>Science</i> , 2003, 301, 479-483.	12.6	379
125	The Asian Monsoon, the Tropospheric Biennial Oscillation, and the Indian Ocean Zonal Mode in the NCAR CSM*. <i>Journal of Climate</i> , 2003, 16, 1617-1642.	3.2	121
126	Coupled Ocean–Atmosphere Dynamical Processes in the Tropical Indian and Pacific Oceans and the TBO. <i>Journal of Climate</i> , 2003, 16, 2138-2158.	3.2	123

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127	Solar and Greenhouse Gas Forcing and Climate Response in the Twentieth Century. <i>Journal of Climate</i> , 2003, 16, 426-444.	3.2	243
128	Indian Monsoon GCM Sensitivity Experiments Testing Tropospheric Biennial Oscillation Transition Conditions. <i>Journal of Climate</i> , 2002, 15, 923-944.	3.2	76
129	The Tropospheric Biennial Oscillation and Asian "Australian Monsoon Rainfall. <i>Journal of Climate</i> , 2002, 15, 722-744.	3.2	177
130	A conceptual framework for time and space scale interactions in the climate system. <i>Climate Dynamics</i> , 2001, 17, 753-775.	3.8	47
131	The Coupled Model Intercomparison Project (CMIP). <i>Bulletin of the American Meteorological Society</i> , 2000, 81, 313-318.	3.3	381
132	Parallel climate model (PCM) control and transient simulations. <i>Climate Dynamics</i> , 2000, 16, 755-774.	3.8	578
133	The South Asian Monsoon and the Tropospheric Biennial Oscillation. <i>Journal of Climate</i> , 1997, 10, 1921-1943.	3.2	279
134	Intercomparison makes for a better climate model. <i>Eos</i> , 1997, 78, 445.	0.1	81
135	Intercomparison of regional biases and doubled CO ₂ -sensitivity of coupled atmosphere-ocean general circulation model experiments. <i>Climate Dynamics</i> , 1997, 14, 1-15.	3.8	72
136	El Niño-like climate change in a model with increased atmospheric CO ₂ concentrations. <i>Nature</i> , 1996, 382, 56-60.	27.8	347
137	Coupled Land-Ocean-Atmosphere Processes and South Asian Monsoon Variability. <i>Science</i> , 1994, 266, 263-267.	12.6	203
138	A Reexamination of the Mechanism of the Semiannual Oscillation in the Southern Hemisphere. <i>Journal of Climate</i> , 1991, 4, 911-926.	3.2	94
139	Climate sensitivity due to increased CO ₂ : experiments with a coupled atmosphere and ocean general circulation model. <i>Climate Dynamics</i> , 1989, 4, 1-38.	3.8	287
140	The Annual Cycle and Interannual Variability in the Tropical Pacific and Indian Ocean Regions. <i>Monthly Weather Review</i> , 1987, 115, 27-50.	1.4	504
141	Seasonal cycle experiment on the climate sensitivity due to a doubling of CO ₂ with an atmospheric general circulation model coupled to a simple mixed-layer ocean model. <i>Journal of Geophysical Research</i> , 1984, 89, 9475-9503.	3.3	360