J T Bacmeister

List of Publications by Year
in descending order

72 papers	11,476 citations	94381 37 h-index	82499 72 g-index
77 all docs	77 docs citations	77 times ranked	11421 citing authors

#	Article	IF	Citations
1	Using TRMM Latent Heat as a Source to Estimate Convection Induced Gravity Wave Momentum Flux in the Lower Stratosphere. Journal of Geophysical Research D: Atmospheres, 2022, 127, e2021JD035785.	1.2	3
2	Observed and Modeled Mountain Waves from the Surface to the Mesosphere near the Drake Passage. Journals of the Atmospheric Sciences, 2022, 79, 909-932.	0.6	19
3	LGM Paleoclimate Constraints Inform Cloud Parameterizations and Equilibrium Climate Sensitivity in CESM2. Journal of Advances in Modeling Earth Systems, 2022, 14, .	1.3	26
4	Exploring Western North Pacific Tropical Cyclone Activity in the Highâ€Resolution Community Atmosphere Model. Earth and Space Science, 2022, 9, .	1.1	2
5	Evaluating the Impact of Chemical Complexity and Horizontal Resolution on Tropospheric Ozone Over the Conterminous US With a Global Variable Resolution Chemistry Model. Journal of Advances in Modeling Earth Systems, 2022, 14, .	1.3	20
6	Observational Validation of Parameterized Gravity Waves From Tropical Convection in the Whole Atmosphere Community Climate Model. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033954.	1.2	7
7	Characteristics of Future Warmer Base States in CESM2. Earth and Space Science, 2020, 7, e2020EA001296.	1.1	14
8	An Evaluation of the Largeâ€Scale Atmospheric Circulation and Its Variability in CESM2 and Other CMIP Models. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032835.	1.2	55
9	Comparison of Equilibrium Climate Sensitivity Estimates From Slab Ocean, 150â€Year, and Longer Simulations. Geophysical Research Letters, 2020, 47, e2020GL088852.	1.5	16
10	CO₂ Increase Experiments Using the CESM: Relationship to Climate Sensitivity and Comparison of CESM1 to CESM2. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002120.	1.3	25
11	The Community Earth System Model Version 2 (CESM2). Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001916.	1.3	935
12	An Unprecedented Set of Highâ€Resolution Earth System Simulations for Understanding Multiscale Interactions in Climate Variability and Change. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002298.	1.3	104
13	High Climate Sensitivity in the Community Earth System Model Version 2 (CESM2). Geophysical Research Letters, 2019, 46, 8329-8337.	1.5	249
14	An Overview of the Atmospheric Component of the Energy Exascale Earth System Model. Journal of Advances in Modeling Earth Systems, 2019, 11, 2377-2411.	1.3	168
15	The Whole Atmosphere Community Climate Model Version 6 (WACCM6). Journal of Geophysical Research D: Atmospheres, 2019, 124, 12380-12403.	1.2	261
16	Exploring the Impact of Dust on North Atlantic Hurricanes in a Highâ€Resolution Climate Model. Geophysical Research Letters, 2019, 46, 1105-1112.	1.5	26
17	A Modeling Strategy for the Investigation of the Effect of Mesoscale SST Variability on Atmospheric Dynamics. Geophysical Research Letters, 2019, 46, 3982-3989.	1.5	15
18	The Single Column Atmosphere Model Version 6 (SCAM6): Not a Scam but a Tool for Model Evaluation and Development. Journal of Advances in Modeling Earth Systems, 2019, 11, 1381-1401.	1.3	36

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19	Effects of Model Resolution, Physics, and Coupling on Southern Hemisphere Storm Tracks in CESM1.3. Geophysical Research Letters, 2019, 46, 12408-12416.	1.5	39
20	Physicsâ€"Dynamics Coupling with Element-Based High-Order Galerkin Methods: Quasi-Equal-Area Physics Grid. Monthly Weather Review, 2019, 147, 69-84.	0.5	21
21	Projected changes in tropical cyclone activity under future warming scenarios using a high-resolution climate model. Climatic Change, 2018, 146, 547-560.	1.7	142
22	Projections of future tropical cyclone damage with a high-resolution global climate model. Climatic Change, 2018, 146, 575-585.	1.7	55
23	Why Do Modeled and Observed Surface Wind Stress Climatologies Differ in the Trade Wind Regions?. Journal of Climate, 2018, 31, 491-513.	1.2	11
24	Regional Climate Simulations With the Community Earth System Model. Journal of Advances in Modeling Earth Systems, 2018, 10, 1245-1265.	1.3	41
25	NCAR Release of CAMâ€SE in CESM2.0: A Reformulation of the Spectral Element Dynamical Core in Dryâ€Mass Vertical Coordinates With Comprehensive Treatment of Condensates and Energy. Journal of Advances in Modeling Earth Systems, 2018, 10, 1537-1570.	1.3	91
26	Radiative and Chemical Response to Interactive Stratospheric Sulfate Aerosols in Fully Coupled CESM1(WACCM). Journal of Geophysical Research D: Atmospheres, 2017, 122, 13,061.	1.2	128
27	Impact of surface coupling grids on tropical cyclone extremes in high-resolution atmospheric simulations. Geoscientific Model Development, 2016, 9, 779-788.	1.3	19
28	Impact of the dynamical core on the direct simulation of tropical cyclones in a highâ€resolution global model. Geophysical Research Letters, 2015, 42, 3603-3608.	1.5	61
29	Development of the GEOS-5 atmospheric general circulation model: evolution from MERRA to MERRA2. Geoscientific Model Development, 2015, 8, 1339-1356.	1.3	822
30	Hurricanes and Climate: The U.S. CLIVAR Working Group on Hurricanes. Bulletin of the American Meteorological Society, 2015, 96, 997-1017.	1.7	158
31	Global Radiativeâ€"Convective Equilibrium in the Community Atmosphere Model, Version 5. Journals of the Atmospheric Sciences, 2015, 72, 2183-2197.	0.6	54
32	Resolution Dependence of Future Tropical Cyclone Projections of CAM5.1 in the U.S. CLIVAR Hurricane Working Group Idealized Configurations. Journal of Climate, 2015, 28, 3905-3925.	1.2	106
33	NCAR_Topo (v1.0): NCAR global model topography generation software for unstructured grids. Geoscientific Model Development, 2015, 8, 3975-3986.	1.3	31
34	Development of two-moment cloud microphysics for liquid and ice within the NASA Goddard Earth Observing System Model (GEOS-5). Geoscientific Model Development, 2014, 7, 1733-1766.	1.3	78
35	On the simulation of the quasi-biennial oscillation in the Community Atmosphere Model, version 5. Journal of Geophysical Research D: Atmospheres, 2014, 119, 3045-3062.	1.2	66
36	Heldâ€Suarez simulations with the Community Atmosphere Model Spectral Element (CAMâ€SE) dynamical core: A global axial angular momentum analysis using Eulerian and floating Lagrangian vertical coordinates. Journal of Advances in Modeling Earth Systems, 2014, 6, 129-140.	1.3	17

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37	The effect of horizontal resolution on simulation quality in the <scp>C</scp>ommunity <scp>A</scp>tmospheric <scp>M</scp>odel, <scp>CAM</scp>5.1. Journal of Advances in Modeling Earth Systems, 2014, 6, 980-997.	1.3	233
38	Effects of vertical resolution and nonorographic gravity wave drag on the simulated climate in the Community Atmosphere Model, version 5. Journal of Advances in Modeling Earth Systems, 2014, 6, 357-383.	1.3	36
39	A new synoptic scale resolving global climate simulation using the Community Earth System Model. Journal of Advances in Modeling Earth Systems, 2014, 6, 1065-1094.	1.3	262
40	Exploratory High-Resolution Climate Simulations using the Community Atmosphere Model (CAM). Journal of Climate, 2014, 27, 3073-3099.	1.2	184
41	Analysis of Tropical Cyclone Precipitation Using an Object-Based Algorithm. Journal of Climate, 2013, 26, 2563-2579.	1.2	32
42	CGILS: Results from the first phase of an international project to understand the physical mechanisms of low cloud feedbacks in single column models. Journal of Advances in Modeling Earth Systems, 2013, 5, 826-842.	1.3	140
43	A Comparison between Gravity Wave Momentum Fluxes in Observations and Climate Models. Journal of Climate, 2013, 26, 6383-6405.	1.2	245
44	Diagnosis of Tropical Biases and the MJO from Patterns in the MERRA Analysis Tendency Fields. Journal of Climate, 2012, 25, 6202-6214.	1.2	51
45	Implementation of new diffusion/filtering operators in the CAM-FV dynamical core. International Journal of High Performance Computing Applications, 2012, 26, 63-73.	2.4	34
46	Assessing possible dynamical effects of condensate in high resolution climate simulations. Geophysical Research Letters, 2012, 39, .	1.5	7
47	Spatial statistics of likely convective clouds in CloudSat data. Journal of Geophysical Research, 2011, 116, .	3.3	51
48	MERRA: NASAâ€™s Modern-Era Retrospective Analysis for Research and Applications. Journal of Climate, 2011, 24, 3624-3648.	1.2	4,118
49	The PreVOCA experiment: modeling the lower troposphere in the Southeast Pacific. Atmospheric Chemistry and Physics, 2010, 10, 4757-4774.	1.9	109
50	Validation of Goddard Earth Observing Systemâ€version 5 MERRA planetary boundary layer heights using CALIPSO. Journal of Geophysical Research, 2010, 115, .	3.3	89
51	Analysis of Convective Transport and Parameter Sensitivity in a Single Column Version of the Goddard Earth Observation System, Version 5, General Circulation Model. Journals of the Atmospheric Sciences, 2009, 66, 627-646.	0.6	30
52	Virtual Field Campaigns on Deep Tropical Convection in Climate Models. Journal of Climate, 2009, 22, 244-257.	1.2	15
53	Potential Predictability of Long-Term Drought and Pluvial Conditions in the U.S. Great Plains. Journal of Climate, 2008, 21, 802-816.	1.2	70
54	North American Monsoon and Convectively Coupled Equatorial Waves Simulated by IPCC AR4 Coupled GCMs. Journal of Climate, 2008, 21, 2919-2937.	1.2	33

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55	Subseasonal Variability Associated with Asian Summer Monsoon Simulated by 14 IPCC AR4 Coupled GCMs. Journal of Climate, 2008, 21, 4541-4567.	1.2	116
56	Frequency Distribution of Daily ITCZ Patterns over the Westernâ€"Central Pacific. Journal of Climate, 2008, 21, 4207-4222.	1.2	16
57	Rain Reevaporation, Boundary Layerâ€"Convection Interactions, and Pacific Rainfall Patterns in an AGCM. Journals of the Atmospheric Sciences, 2006, 63, 3383-3403.	0.6	164
58	A comparison of low-latitude cloud properties and their response to climate change in three AGCMs sorted into regimes using mid-tropospheric vertical velocity. Climate Dynamics, 2006, 27, 261-279.	1.7	101
59	On the Cause of the 1930s Dust Bowl. Science, 2004, 303, 1855-1859.	6.0	494
60	Causes of Long-Term Drought in the U.S. Great Plains. Journal of Climate, 2004, 17, 485-503.	1.2	307
61	Wind Stress Simulations and the Equatorial Momentum Budget in an AGCM. Journals of the Atmospheric Sciences, 2002, 59, 3051-3073.	0.6	24
62	Scale dependence of tracer microstructure: PDFs, intermittency and the dissipation scale. Geophysical Research Letters, 2001, 28, 2823-2826.	1.5	27
63	Mesoscale Temperature Fluctuations Induced by a Spectrum of Gravity Waves: A Comparison of Parameterizations and Their Impact on Stratospheric Microphysics. Journals of the Atmospheric Sciences, 1999, 56, 1913-1924.	0.6	35
64	Increased stratospheric ozone depletion due to mountain-induced atmospheric waves. Nature, 1998, 391, 675-678.	13.7	198
65	Changes in upper stratospheric CH4and NO2as measured by HALOE and implications for changes in transport. Geophysical Research Letters, 1998, 25, 987-990.	1.5	38
66	Gravity Wave Perturbations of Minor Constituents: A Parcel Advection Methodology. Journals of the Atmospheric Sciences, 1998, 55, 3521-3539.	0.6	29
67	Space-borne H2O observations in the Arctic stratosphere and mesosphere in the spring of 1992. Geophysical Research Letters, 1996, 23, 2325-2328.	1.5	12
68	Observational constraints on the formation of type ia polar stratospheric clouds. Geophysical Research Letters, 1996, 23, 2109-2112.	1.5	51
69	An Algorithm for Forecasting Mountain Waveâ€"Related Turbulence in the Stratosphere. Weather and Forecasting, 1994, 9, 241-253.	0.5	66
70	ERâ€2 mountain wave encounter over Antarctica: Evidence for blocking. Geophysical Research Letters, 1990, 17, 81-84.	1.5	26
71	Smallâ€scale waves encountered during AASE. Geophysical Research Letters, 1990, 17, 349-352.	1.5	21
72	On High-Drag States of Nonlinear Stratified Flow over an Obstacle. Journals of the Atmospheric Sciences, 1988, 45, 63-80.	0.6	84