

Phil Rasch

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4849400/publications.pdf>

Version: 2024-02-01

227
papers

28,791
citations

8181

76
h-index

6300

158
g-index

255
all docs

255
docs citations

255
times ranked

18265
citing authors

#	ARTICLE	IF	CITATIONS
1	A comparison of scavenging and deposition processes in global models: results from the WCRP Cambridge Workshop of 1995. Tellus, Series B: Chemical and Physical Meteorology, 2022, 52, 1025.	1.6	78
2	The Madden-Julian Oscillation in the Energy Exascale Earth System Model Version 1. Journal of Advances in Modeling Earth Systems, 2022, 14, .	3.8	1
3	Observations Indicate That Clouds Amplify Mechanisms of Southern Ocean Heat Uptake. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	4
4	Increased Variability of Biomass Burning Emissions in CMIP6 Amplifies Hydrologic Cycle in the CESM2 Large Ensemble. Geophysical Research Letters, 2022, 49, .	4.0	8
5	Better calibration of cloud parameterizations and subgrid effects increases the fidelity of the E3SM Atmosphere Model version 1. Geoscientific Model Development, 2022, 15, 2881-2916.	3.6	17
6	CondiDiag1.0: a flexible online diagnostic tool for conditional sampling and budget analysis in the E3SM atmosphere model (EAM). Geoscientific Model Development, 2022, 15, 3205-3231.	3.6	4
7	OCEANFILMS (Organic Compounds from Ecosystems to Aerosols: Natural Films and Interfaces via) Tj ETQq1 1 0.784314 rgBT /Overlook climate model and impacts on clouds. Atmospheric Chemistry and Physics, 2022, 22, 5223-5251.	4.9	14
8	Effective radiative forcing of anthropogenic aerosols in E3SM version 1: historical changes, causality, decomposition, and parameterization sensitivities. Atmospheric Chemistry and Physics, 2022, 22, 9129-9160.	4.9	16
9	Global Dust Cycle and Direct Radiative Effect in E3SM Version 1: Impact of Increasing Model Resolution. Journal of Advances in Modeling Earth Systems, 2022, 14, .	3.8	12
10	A Lagrangian Perspective on Tropical Anvil Cloud Lifecycle in Present and Future Climate. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033487.	3.3	14
11	Quantifying and attributing time step sensitivities in present-day climate simulations conducted with EAMv1. Geoscientific Model Development, 2021, 14, 1921-1948.	3.6	13
12	Development and Evaluation of Chemistry-Aerosol-Climate Model CAM5-Chem-MAM7-MOSAIC: Global Atmospheric Distribution and Radiative Effects of Nitrate Aerosol. Journal of Advances in Modeling Earth Systems, 2021, 13, e2020MS002346.	3.8	17
13	Effects of Organized Convection Parameterization on the MJO and Precipitation in E3SMv1. Part I: Mesoscale Heating. Journal of Advances in Modeling Earth Systems, 2021, 13, e2020MS002401.	3.8	14
14	Radiative Forcing of Nitrate Aerosols From 1975 to 2010 as Simulated by MOSAIC Module in CESM2-MAM4. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034809.	3.3	14
15	Understanding the Cold Season Arctic Surface Warming Trend in Recent Decades. Geophysical Research Letters, 2021, 48, e2021GL094878.	4.0	9
16	Increasing large wildfires over the western United States linked to diminishing sea ice in the Arctic. Nature Communications, 2021, 12, 6048.	12.8	26
17	Aerosols in the E3SM Version 1: New Developments and Their Impacts on Radiative Forcing. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001851.	3.8	68
18	A Partial Coupling Method to Isolate the Roles of the Atmosphere and Ocean in Coupled Climate Simulations. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS002016.	3.8	5

#	ARTICLE	IF	CITATIONS
19	Disentangling the Coupled Atmosphere–Ocean–Ice Interactions Driving Arctic Sea Ice Response to CO ₂ Increases. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2019MS001902.	3.8	2
20	Improving Time Step Convergence in an Atmosphere Model With Simplified Physics: The Impacts of Closure Assumption and Process Coupling. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2019MS001982.	3.8	5
21	Assessing Global and Local Radiative Feedbacks Based on AGCM Simulations for 1980–2014/2017. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088063.	4.0	9
22	Influence of sea-ice anomalies on Antarctic precipitation using source attribution in the Community Earth System Model. <i>Cryosphere</i> , 2020, 14, 429-444.	3.9	16
23	The Community Earth System Model Version 2 (CESM2). <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2019MS001916.	3.8	935
24	Atmospheric teleconnection processes linking winter air stagnation and haze extremes in China with regional Arctic sea ice decline. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 4999-5017.	4.9	20
25	New SOA Treatments Within the Energy Exascale Earth System Model (E3SM): Strong Production and Sinks Govern Atmospheric SOA Distributions and Radiative Forcing. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2020MS002266.	3.8	15
26	Regionally refined test bed in E3SM atmosphere model version 1 (EAMv1) and applications for high-resolution modeling. <i>Geoscientific Model Development</i> , 2019, 12, 2679-2706.	3.6	49
27	An Overview of the Atmospheric Component of the Energy Exascale Earth System Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 2377-2411.	3.8	168
28	Understanding Monsoonal Water Cycle Changes in a Warmer Climate in E3SMv1 Using a Normalized Gross Moist Stability Framework. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 10826-10843.	3.3	6
29	E3SMv0–HiLAT: A Modified Climate System Model Targeted for the Study of High-Latitude Processes. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 2814-2843.	3.8	9
30	Black Carbon Increases Frequency of Extreme ENSO Events. <i>Journal of Climate</i> , 2019, 32, 8323-8333.	3.2	11
31	Three-Moment Representation of Rain in a Bulk Microphysics Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 257-277.	3.8	32
32	Variability, timescales, and nonlinearity in climate responses to black carbon emissions. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 2405-2420.	4.9	34
33	Evaluation of Clouds in Version 1 of the E3SM Atmosphere Model With Satellite Simulators. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 1253-1268.	3.8	55
34	Impact of Anthropogenic Emission Injection Height Uncertainty on Global Sulfur Dioxide and Aerosol Distribution. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 4812-4826.	3.3	13
35	Northern Hemisphere Blocking in 1/425-km-Resolution E3SM v0.3 Atmosphere–Land Simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 2465-2482.	3.3	7
36	The DOE E3SM Coupled Model Version 1: Overview and Evaluation at Standard Resolution. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 2089-2129.	3.8	404

#	ARTICLE	IF	CITATIONS
37	An Objective and Efficient Method for Assessing the Impact of Reducedâ€Precision Calculations On Solution Correctness. Journal of Advances in Modeling Earth Systems, 2019, 11, 3131-3147.	3.8	0
38	Unraveling driving forces explaining significant reduction in satellite-inferred Arctic surface albedo since the 1980s. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23947-23953.	7.1	51
39	Subtropical Marine Low Stratiform Cloud Deck Spatial Errors in the E3SMv1 Atmosphere Model. Geophysical Research Letters, 2019, 46, 12598-12607.	4.0	11
40	Improved Simulation of the QBO in E3SMv1. Journal of Advances in Modeling Earth Systems, 2019, 11, 3403-3418.	3.8	15
41	Antarctic Sea Ice Expansion, Driven by Internal Variability, in the Presence of Increasing Atmospheric CO ₂ . Geophysical Research Letters, 2019, 46, 14762-14771.	4.0	17
42	Black Carbon Amplifies Haze Over the North China Plain by Weakening the East Asian Winter Monsoon. Geophysical Research Letters, 2019, 46, 452-460.	4.0	49
43	Using the Atmospheric Radiation Measurement (ARM) Datasets to Evaluate Climate Models in Simulating Diurnal and Seasonal Variations of Tropical Clouds. Journal of Climate, 2018, 31, 3301-3325.	3.2	9
44	The Role of Convective Gustiness in Reducing Seasonal Precipitation Biases in the Tropical West Pacific. Journal of Advances in Modeling Earth Systems, 2018, 10, 961-970.	3.8	26
45	Recent intensification of winter haze in China linked to foreign emissions and meteorology. Scientific Reports, 2018, 8, 2107.	3.3	48
46	Investigating the Linear Dependence of Direct and Indirect Radiative Forcing on Emission of Carbonaceous Aerosols in a Global Climate Model. Journal of Geophysical Research D: Atmospheres, 2018, 123, 1657-1672.	3.3	5
47	Sulfate Aerosol in the Arctic: Source Attribution and Radiative Forcing. Journal of Geophysical Research D: Atmospheres, 2018, 123, 1899-1918.	3.3	38
48	Impact of numerical choices on water conservation in the E3SM Atmosphere Model version 1 (EAMv1). Geoscientific Model Development, 2018, 11, 1971-1988.	3.6	33
49	Understanding Cloud and Convective Characteristics in Version 1 of the E3SM Atmosphere Model. Journal of Advances in Modeling Earth Systems, 2018, 10, 2618-2644.	3.8	105
50	Parametric Sensitivity and Uncertainty Quantification in the Version 1 of E3SM Atmosphere Model Based on Short Perturbed Parameter Ensemble Simulations. Journal of Geophysical Research D: Atmospheres, 2018, 123, 13,046.	3.3	53
51	How Asymmetries Between Arctic and Antarctic Climate Sensitivity Are Modified by the Ocean. Geophysical Research Letters, 2018, 45, 13,031.	4.0	10
52	Climatic Responses to Future Transâ€Arctic Shipping. Geophysical Research Letters, 2018, 45, 9898-9908.	4.0	34
53	The climate effects of increasing ocean albedo: an idealized representation of solar geoengineering. Atmospheric Chemistry and Physics, 2018, 18, 13097-13113.	4.9	19
54	Characterizing the Relative Importance Assigned to Physical Variables by Climate Scientists when Assessing Atmospheric Climate Model Fidelity. Advances in Atmospheric Sciences, 2018, 35, 1101-1113.	4.3	6

#	ARTICLE	IF	CITATIONS
55	Observational constraint on cloud susceptibility weakened by aerosol retrieval limitations. <i>Nature Communications</i> , 2018, 9, 2640.	12.8	38
56	Physicsâ€“Dynamics Coupling in Weather, Climate, and Earth System Models: Challenges and Recent Progress. <i>Monthly Weather Review</i> , 2018, 146, 3505-3544.	1.4	52
57	On the Relative Roles of the Atmosphere and Ocean in the Atlantic Multidecadal Variability. <i>Geophysical Research Letters</i> , 2018, 45, 9186-9196.	4.0	19
58	Local Radiative Feedbacks Over the Arctic Based on Observed Shortâ€“Term Climate Variations. <i>Geophysical Research Letters</i> , 2018, 45, 5761-5770.	4.0	26
59	Source Apportionments of Aerosols and Their Direct Radiative Forcing and Longâ€“Term Trends Over Continental United States. <i>Earth's Future</i> , 2018, 6, 793-808.	6.3	42
60	Linking deep convection and phytoplankton blooms in the northern Labrador Sea in a changing climate. <i>PLoS ONE</i> , 2018, 13, e0191509.	2.5	7
61	Global long-range transport and lung cancer risk from polycyclic aromatic hydrocarbons shielded by coatings of organic aerosol. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 1246-1251.	7.1	185
62	Large Contribution of Coarse Mode to Aerosol Microphysical and Optical Properties: Evidence from Ground-Based Observations of a Transpacific Dust Outbreak at a High-Elevation North American Site. <i>Journals of the Atmospheric Sciences</i> , 2017, 74, 1431-1443.	1.7	6
63	Could geoengineering research help answer one of the biggest questions in climate science?. <i>Earth's Future</i> , 2017, 5, 659-663.	6.3	33
64	Empirical Analysis of the Subjective Impressions and Objective Measures of Domain Scientists' Visual Analytic Judgments. , 2017, , .		14
65	Accelerated increase in the Arctic tropospheric warming events surpassing stratospheric warming events during winter. <i>Geophysical Research Letters</i> , 2017, 44, 3806-3815.	4.0	17
66	A Sourceâ€“Receptor Perspective on the Polar Hydrologic Cycle: Sources, Seasonality, and Arcticâ€“Antarctic Parity in the Hydrologic Cycle Response to CO ₂ Doubling. <i>Journal of Climate</i> , 2017, 30, 9999-10017.	3.2	26
67	Increased Ocean Heat Convergence Into the High Latitudes With CO ₂ Doubling Enhances Polarâ€“Amplified Warming. <i>Geophysical Research Letters</i> , 2017, 44, 10,583.	4.0	44
68	Technical note: Simultaneous fully dynamic characterization of multiple inputâ€“output relationships in climate models. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 2525-2541.	4.9	3
69	Source attribution of black carbon and its direct radiative forcing in China. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 4319-4336.	4.9	76
70	Global source attribution of sulfate concentration and direct and indirect radiative forcing. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 8903-8922.	4.9	58
71	A new and inexpensive non-bit-for-bit solution reproducibility test based on time stepâ€“convergence (TSC1.0). <i>Geoscientific Model Development</i> , 2017, 10, 537-552.	3.6	9
72	Recent advances in understanding secondary organic aerosol: Implications for global climate forcing. <i>Reviews of Geophysics</i> , 2017, 55, 509-559.	23.0	548

#	ARTICLE	IF	CITATIONS
73	Geoengineering as a design problem. <i>Earth System Dynamics</i> , 2016, 7, 469-497.	7.1	96
74	Description and evaluation of a new four-mode version of the Modal Aerosol Module (MAM4) within version 5.3 of the Community Atmosphere Model. <i>Geoscientific Model Development</i> , 2016, 9, 505-522.	3.6	313
75	Toward reconciling the influence of atmospheric aerosols and greenhouse gases on light precipitation changes in Eastern China. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 5878-5887.	3.3	46
76	Improving our fundamental understanding of the role of aerosol-cloud interactions in the climate system. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 5781-5790.	7.1	479
77	Impacts of ENSO events on cloud radiative effects in preindustrial conditions: Changes in cloud fraction and their dependence on interactive aerosol emissions and concentrations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 6321-6335.	3.3	23
78	Geoengineering with stratospheric aerosols: What do we not know after a decade of research?. <i>Earth's Future</i> , 2016, 4, 543-548.	6.3	35
79	Evaluation of observed and modelled aerosol lifetimes using radioactive tracers of opportunity and an ensemble of 19 global models. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 3525-3561.	4.9	75
80	The role of carbonaceous aerosols on short-term variations of precipitation over North Africa. <i>Atmospheric Science Letters</i> , 2016, 17, 407-414.	1.9	9
81	A multiscale modeling framework model (superparameterized CAM5) with a higher-order turbulence closure: Model description and low-cloud simulations. <i>Journal of Advances in Modeling Earth Systems</i> , 2015, 7, 484-509.	3.8	39
82	How does increasing horizontal resolution in a global climate model improve the simulation of aerosol-cloud interactions?. <i>Geophysical Research Letters</i> , 2015, 42, 5058-5065.	4.0	62
83	Global transformation and fate of SOA: Implications of low-volatility SOA and gas-phase fragmentation reactions. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 4169-4195.	3.3	123
84	On solar geoengineering and climate uncertainty. <i>Geophysical Research Letters</i> , 2015, 42, 7156-7161.	4.0	16
85	Parametric sensitivity analysis of precipitation at global and local scales in the Community Atmosphere Model CAM5. <i>Journal of Advances in Modeling Earth Systems</i> , 2015, 7, 382-411.	3.8	80
86	Quantifying sources, transport, deposition, and radiative forcing of black carbon over the Himalayas and Tibetan Plateau. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 6205-6223.	4.9	128
87	Carbonaceous aerosols recorded in a southeastern Tibetan glacier: analysis of temporal variations and model estimates of sources and radiative forcing. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 1191-1204.	4.9	72
88	Quantifying sources of black carbon in western North America using observationally based analysis and an emission tagging technique in the Community Atmosphere Model. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 12805-12822.	4.9	16
89	A New Method of Comparing Forcing Agents in Climate Models*. <i>Journal of Climate</i> , 2015, 28, 8203-8218.	3.2	18
90	Extreme Fire Season in California: A Glimpse Into the Future?. <i>Bulletin of the American Meteorological Society</i> , 2015, 96, S5-S9.	3.3	63

#	ARTICLE	IF	CITATIONS
91	Parameterizing deep convection using the assumed probability density function method. Geoscientific Model Development, 2015, 8, 1-19.	3.6	40
92	Interannual to decadal climate variability of sea salt aerosols in the coupled climate model CESM1.0. Journal of Geophysical Research D: Atmospheres, 2015, 120, 1502-1519.	3.3	13
93	Short-term time step convergence in a climate model. Journal of Advances in Modeling Earth Systems, 2015, 7, 215-225.	3.8	37
94	Increasing water cycle extremes in California and in relation to ENSO cycle under global warming. Nature Communications, 2015, 6, 8657.	12.8	153
95	Assessing the CAM5 physics suite in the WRF-Chem model: implementation, resolution sensitivity, and a first evaluation for a regional case study. Geoscientific Model Development, 2014, 7, 755-778.	3.6	74
96	A multi-model assessment of regional climate disparities caused by solar geoengineering. Environmental Research Letters, 2014, 9, 074013.	5.2	101
97	Process-model simulations of cloud albedo enhancement by aerosols in the Arctic. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20140052.	3.4	21
98	Explicit feedback and the management of uncertainty in meeting climate objectives with solar geoengineering. Environmental Research Letters, 2014, 9, 044006.	5.2	35
99	Short ensembles: an efficient method for discerning climate-relevant sensitivities in atmospheric general circulation models. Geoscientific Model Development, 2014, 7, 1961-1977.	3.6	49
100	A sensitivity study on modeling black carbon in snow and its radiative forcing over the Arctic and Northern China. Environmental Research Letters, 2014, 9, 064001.	5.2	67
101	Short-term modulation of Indian summer monsoon rainfall by West Asian dust. Nature Geoscience, 2014, 7, 308-313.	12.9	324
102	Integrating Cloud Processes in the Community Atmosphere Model, Version 5. Journal of Climate, 2014, 27, 6821-6856.	3.2	252
103	Climate engineering: exploring nuances and consequences of deliberately altering the Earth's energy budget. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20140050.	3.4	2
104	Using an explicit emission tagging method in global modeling of source-receptor relationships for black carbon in the Arctic: Variations, sources, and transport pathways. Journal of Geophysical Research D: Atmospheres, 2014, 119, 12,888.	3.3	92
105	A physically based framework for modeling the organic fractionation of sea spray aerosol from bubble film Langmuir equilibria. Atmospheric Chemistry and Physics, 2014, 14, 13601-13629.	4.9	124
106	Technical Note: On the use of nudging for aerosol-climate model intercomparison studies. Atmospheric Chemistry and Physics, 2014, 14, 8631-8645.	4.9	143
107	Forcings and feedbacks in the GeoMIP ensemble for a reduction in solar irradiance and increase in CO ₂ . Journal of Geophysical Research D: Atmospheres, 2014, 119, 5226-5239.	3.3	19
108	Climate model response from the Geoengineering Model Intercomparison Project (GeoMIP). Journal of Geophysical Research D: Atmospheres, 2013, 118, 8320-8332.	3.3	226

#	ARTICLE	IF	CITATIONS
109	The Separate Physics and Dynamics Experiment (SPADE) framework for determining resolution awareness: A case study of microphysics. Journal of Geophysical Research D: Atmospheres, 2013, 118, 9258-9276.	3.3	13
110	The long-term policy context for solar radiation management. Climatic Change, 2013, 121, 487-497.	3.6	22
111	A novel approach for determining source–receptor relationships in model simulations: a case study of black carbon transport in northern hemisphere winter. Environmental Research Letters, 2013, 8, 024042.	5.2	19
112	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.	3.8	140
113	Numerical issues associated with compensating and competing processes in climate models: an example from ECHAM-HAM. Geoscientific Model Development, 2013, 6, 861-874.	3.6	29
114	The Mean Climate of the Community Atmosphere Model (CAM4) in Forced SST and Fully Coupled Experiments. Journal of Climate, 2013, 26, 5150-5168.	3.2	639
115	Sea spray geoengineering experiments in the geoengineering model intercomparison project (GeoMIP): Experimental design and preliminary results. Journal of Geophysical Research D: Atmospheres, 2013, 118, 11,175.	3.3	37
116	Radiative forcing of the direct aerosol effect from AeroCom Phase II simulations. Atmospheric Chemistry and Physics, 2013, 13, 1853-1877.	4.9	779
117	The role of circulation features on black carbon transport into the Arctic in the Community Atmosphere Model version 5 (CAM5). Journal of Geophysical Research D: Atmospheres, 2013, 118, 4657-4669.	3.3	64
118	The hydrological impact of geoengineering in the Geoengineering Model Intercomparison Project (GeoMIP). Journal of Geophysical Research D: Atmospheres, 2013, 118, 11,036.	3.3	202
119	Uncertainty quantification and parameter tuning in the CAM5 Zhang–McFarlane convection scheme and impact of improved convection on the global circulation and climate. Journal of Geophysical Research D: Atmospheres, 2013, 118, 395-415.	3.3	112
120	Sensitivity of remote aerosol distributions to representation of cloud–aerosol interactions in a global climate model. Geoscientific Model Development, 2013, 6, 765-782.	3.6	169
121	An energetic perspective on hydrological cycle changes in the Geoengineering Model Intercomparison Project. Journal of Geophysical Research D: Atmospheres, 2013, 118, 13,087.	3.3	63
122	Toward a Minimal Representation of Aerosols in Climate Models: Comparative Decomposition of Aerosol Direct, Semidirect, and Indirect Radiative Forcing. Journal of Climate, 2012, 25, 6461-6476.	3.2	269
123	Climate Simulations with an Isentropic Finite-Volume Dynamical Core. Journal of Climate, 2012, 25, 2843-2861.	3.2	4
124	CAM-chem: description and evaluation of interactive atmospheric chemistry in the Community Earth System Model. Geoscientific Model Development, 2012, 5, 369-411.	3.6	633
125	Fast and slow responses of the South Asian monsoon system to anthropogenic aerosols. Geophysical Research Letters, 2012, 39, .	4.0	113
126	Climate response of the South Asian monsoon system to anthropogenic aerosols. Journal of Geophysical Research, 2012, 117, .	3.3	173

#	ARTICLE	IF	CITATIONS
127	Aerosol optical depth increase in partly cloudy conditions. Journal of Geophysical Research, 2012, 117, .	3.3	65
128	Ecosystem Impacts of Geoengineering: A Review for Developing a Science Plan. Ambio, 2012, 41, 350-369.	5.5	69
129	The roles of cloud drop effective radius and $\langle LWP \rangle$ in determining rain properties in marine stratocumulus. Geophysical Research Letters, 2012, 39, .	4.0	66
130	Representation of Arctic mixed-phase clouds and the Wegener-Bergeron-Findeisen process in climate models: Perspectives from a cloud-resolving study. Journal of Geophysical Research, 2011, 116, .	3.3	63
131	Direct and semidirect aerosol effects of southern African biomass burning aerosol. Journal of Geophysical Research, 2011, 116, .	3.3	115
132	Tropical and Subtropical Cloud Transitions in Weather and Climate Prediction Models: The GCSS/WGNE Pacific Cross-Section Intercomparison (GPCI). Journal of Climate, 2011, 24, 5223-5256.	3.2	134
133	The Community Climate System Model Version 4. Journal of Climate, 2011, 24, 4973-4991.	3.2	2,428
134	Manipulating marine stratocumulus cloud amount and albedo: a process-modelling study of aerosol-cloud-precipitation interactions in response to injection of cloud condensation nuclei. Atmospheric Chemistry and Physics, 2011, 11, 4237-4249.	4.9	85
135	Do biomass burning aerosols intensify drought in equatorial Asia during El Niño? Atmospheric Chemistry and Physics, 2010, 10, 3515-3528.	4.9	87
136	Technical fixes and climate change: optimizing for risks and consequences. Environmental Research Letters, 2010, 5, 031001.	5.2	3
137	An Evaluation of ENSO Asymmetry in the Community Climate System Models: A View from the Subsurface. Journal of Climate, 2009, 22, 5933-5961.	3.2	31
138	Impact of geoengineered aerosols on the troposphere and stratosphere. Journal of Geophysical Research, 2009, 114, .	3.3	141
139	Initiative to Improve Process Representation in Chemistry-Climate Models. Eos, 2009, 90, 206-207.	0.1	0
140	Aerosol indirect effects “ general circulation model intercomparison and evaluation with satellite data. Atmospheric Chemistry and Physics, 2009, 9, 8697-8717.	4.9	418
141	Springtime warming and reduced snow cover from carbonaceous particles. Atmospheric Chemistry and Physics, 2009, 9, 2481-2497.	4.9	492
142	Geoengineering by cloud seeding: influence on sea ice and climate system. Environmental Research Letters, 2009, 4, 045112.	5.2	80
143	Global temperature stabilization via controlled albedo enhancement of low-level maritime clouds. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 3969-3987.	3.4	163
144	Exploring the geoengineering of climate using stratospheric sulfate aerosols: The role of particle size. Geophysical Research Letters, 2008, 35, .	4.0	173

#	ARTICLE	IF	CITATIONS
145	Impact of the summer 2004 Alaska fires on top of the atmosphere clear-sky radiation fluxes. Journal of Geophysical Research, 2008, 113, .	3.3	30
146	Impact of small ice crystal assumptions on ice sedimentation rates in cirrus clouds and GCM simulations. Geophysical Research Letters, 2008, 35, .	4.0	106
147	Midlatitude Cyclone Compositing to Constrain Climate Model Behavior Using Satellite Observations. Journal of Climate, 2008, 21, 5887-5903.	3.2	44
148	Effects of Convective Momentum Transport on the Atmospheric Circulation in the Community Atmosphere Model, Version 3. Journal of Climate, 2008, 21, 1487-1499.	3.2	265
149	An overview of geoengineering of climate using stratospheric sulphate aerosols. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 4007-4037.	3.4	251
150	Impact of anthropogenic atmospheric nitrogen and sulfur deposition on ocean acidification and the inorganic carbon system. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14580-14585.	7.1	332
151	Present-day climate forcing and response from black carbon in snow. Journal of Geophysical Research, 2007, 112, .	3.3	1,059
152	Change in atmospheric mineral aerosols in response to climate: Last glacial period, preindustrial, modern, and doubled carbon dioxide climates. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	427
153	Tropical Intraseasonal Variability in 14 IPCC AR4 Climate Models. Part I: Convective Signals. Journal of Climate, 2006, 19, 2665-2690.	3.2	664
154	Simulation of the Global Hydrological Cycle in the CCSM Community Atmosphere Model Version 3 (CAM3): Mean Features. Journal of Climate, 2006, 19, 2199-2221.	3.2	141
155	Characteristics of Atmospheric Transport Using Three Numerical Formulations for Atmospheric Dynamics in a Single GCM Framework. Journal of Climate, 2006, 19, 2243-2266.	3.2	61
156	A Characterization of Tropical Transient Activity in the CAM3 Atmospheric Hydrologic Cycle. Journal of Climate, 2006, 19, 2222-2242.	3.2	39
157	Representation of Clouds and Precipitation Processes in the Community Atmosphere Model Version 3 (CAM3). Journal of Climate, 2006, 19, 2184-2198.	3.2	136
158	The Formulation and Atmospheric Simulation of the Community Atmosphere Model Version 3 (CAM3). Journal of Climate, 2006, 19, 2144-2161.	3.2	895
159	Tracer Transport in Deep Convective Updrafts: Plume Ensemble versus Bulk Formulations. Journals of the Atmospheric Sciences, 2005, 62, 2880-2894.	1.7	60
160	Assessing future nitrogen deposition and carbon cycle feedback using a multimodel approach: Analysis of nitrogen deposition. Journal of Geophysical Research, 2005, 110, .	3.3	266
161	Using the PARAGON Framework to Establish an Accurate, Consistent, and Cohesive Long-Term Aerosol Record. Bulletin of the American Meteorological Society, 2004, 85, 1535-1548.	3.3	11
162	The influence of large-scale wind power on global climate. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 16115-16120.	7.1	255

#	ARTICLE	IF	CITATIONS
163	Integrating and Interpreting Aerosol Observations and Models within the PARAGON Framework. Bulletin of the American Meteorological Society, 2004, 85, 1523-1534.	3.3	19
164	PARAGON: An Integrated Approach for Characterizing Aerosol Climate Impacts and Environmental Interactions. Bulletin of the American Meteorological Society, 2004, 85, 1491-1502.	3.3	59
165	Analysis of Multi-angle Imaging SpectroRadiometer (MISR) aerosol optical depths over greater India during winter 2001-2004. Geophysical Research Letters, 2004, 31, .	4.0	199
166	Antarctic Clouds and Radiation within the NCAR Climate Models*. Journal of Climate, 2004, 17, 1198-1212.	3.2	21
167	A global simulation of tropospheric ozone and related tracers: Description and evaluation of MOZART, version 2. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	848
168	A model for studies of tropospheric ozone and nonmethane hydrocarbons: Model description and ozone results. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	174
169	A new interactive chemistry-climate model: 1. Present-day climatology and interannual variability of the middle atmosphere using the model and 9 years of HALOE/UARS data. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	74
170	A model for studies of tropospheric ozone and nonmethane hydrocarbons: Model evaluation of ozone-related species. Journal of Geophysical Research, 2003, 108, .	3.3	131
171	The balance of effects of deep convective mixing on tropospheric ozone. Geophysical Research Letters, 2003, 30, .	4.0	92
172	Effect of clouds on photolysis and oxidants in the troposphere. Journal of Geophysical Research, 2003, 108, .	3.3	240
173	Global chemical weather forecasts for field campaign planning: predictions and observations of large-scale features during MINOS, CONTRACE, and INDOEX. Atmospheric Chemistry and Physics, 2003, 3, 267-289.	4.9	128
174	Determining the UV imaginary index of refraction of Saharan dust particles from Total Ozone Mapping Spectrometer data using a three-dimensional model of dust transport. Journal of Geophysical Research, 2002, 107, AAC 4-1.	3.3	84
175	Parameterizing Vertically Coherent Cloud Distributions. Journals of the Atmospheric Sciences, 2002, 59, 2165-2182.	1.7	32
176	The Global Modeling Initiative assessment model: Application to high-speed civil transport perturbation. Journal of Geophysical Research, 2001, 106, 1693-1711.	3.3	28
177	Global Modeling Initiative assessment model: Model description, integration, and testing of the transport shell. Journal of Geophysical Research, 2001, 106, 1669-1691.	3.3	77
178	Understanding the Indian Ocean Experiment (INDOEX) aerosol distributions with an aerosol assimilation. Journal of Geophysical Research, 2001, 106, 7337-7355.	3.3	168
179	Dust and pollution transport on global scales: Aerosol measurements and model predictions. Journal of Geophysical Research, 2001, 106, 32555-32569.	3.3	116
180	Improvements to the NCAR CSM-1 for Transient Climate Simulations. Journal of Climate, 2001, 14, 164-179.	3.2	61

#	ARTICLE	IF	CITATIONS
181	On a fundamental problem in implementing flux-form advection schemes for tracer transport in 3-dimensional general circulation and chemistry transport models. Quarterly Journal of the Royal Meteorological Society, 2001, 127, 1035-1052.	2.7	95
182	On a fundamental problem in implementing flux-form advection schemes for tracer transport in 3-dimensional general circulation and chemistry transport models. Quarterly Journal of the Royal Meteorological Society, 2001, 127, 1035-1052.	2.7	3
183	A comparison of scavenging and deposition processes in global models: results from the WCRP Cambridge Workshop of 1995. Tellus, Series B: Chemical and Physical Meteorology, 2000, 52, 1025-1056.	1.6	113
184	Radiative forcing due to sulfate aerosols from simulations with the National Center for Atmospheric Research Community Climate Model, Version 3. Journal of Geophysical Research, 2000, 105, 1441-1457.	3.3	201
185	Sulfur chemistry in the National Center for Atmospheric Research Community Climate Model: Description, evaluation, features, and sensitivity to aqueous chemistry. Journal of Geophysical Research, 2000, 105, 1387-1415.	3.3	243
186	A description of the global sulfur cycle and its controlling processes in the National Center for Atmospheric Research Community Climate Model, Version 3. Journal of Geophysical Research, 2000, 105, 1367-1385.	3.3	170
187	A model for studies of tropospheric photochemistry: Description, global distributions, and evaluation. Journal of Geophysical Research, 1999, 104, 26245-26277.	3.3	159
188	Choosing meteorological input for the global modeling initiative assessment of high-speed aircraft. Journal of Geophysical Research, 1999, 104, 27545-27564.	3.3	76
189	Analysis of the CEPEX ozone data using a 3D chemistry-meteorology model. Quarterly Journal of the Royal Meteorological Society, 1999, 125, 2987-3009.	2.7	23
190	Analysis of the CEPEX ozone data using a 3D chemistry-meteorology model. Quarterly Journal of the Royal Meteorological Society, 1999, 125, 2987-3009.	2.7	1
191	Atmospheric CO ₂ simulated by the National Center for Atmospheric Research Community Climate Model: 1. Mean fields and seasonal cycles. Journal of Geophysical Research, 1998, 103, 13213-13235.	3.3	21
192	MOZART, a global chemical transport model for ozone and related chemical tracers: 1. Model description. Journal of Geophysical Research, 1998, 103, 28265-28289.	3.3	402
193	MOZART, a global chemical transport model for ozone and related chemical tracers: 2. Model results and evaluation. Journal of Geophysical Research, 1998, 103, 28291-28335.	3.3	264
194	A Comparison of the CCM3 Model Climate Using Diagnosed and Predicted Condensate Parameterizations. Journal of Climate, 1998, 11, 1587-1614.	3.2	475
195	Response of Climate Simulation to a New Convective Parameterization in the National Center for Atmospheric Research Community Climate Model (CCM3)*. Journal of Climate, 1998, 11, 2097-2115.	3.2	33
196	The National Center for Atmospheric Research Community Climate Model: CCM3*. Journal of Climate, 1998, 11, 1131-1149.	3.2	970
197	Three-dimensional simulations of long-lived tracers using winds from MACCM2. Journal of Geophysical Research, 1997, 102, 21493-21513.	3.3	64
198	Transport of ²²² Rn to the remote troposphere using the Model of Atmospheric Transport and Chemistry and assimilated winds from ECMWF and the National Center for Environmental Prediction/NCAR. Journal of Geophysical Research, 1997, 102, 28139-28151.	3.3	148

#	ARTICLE	IF	CITATIONS
199	Deducing CCl ₃ F emissions using an inverse method and chemical transport models with assimilated winds. Journal of Geophysical Research, 1997, 102, 28153-28168.	3.3	54
200	Representations of transport, convection, and the hydrologic cycle in chemical transport models: Implications for the modeling of short-lived and soluble species. Journal of Geophysical Research, 1997, 102, 28127-28138.	3.3	287
201	Evaluation and intercomparison of global atmospheric transport models using ²²² Rn and other short-lived tracers. Journal of Geophysical Research, 1997, 102, 5953-5970.	3.3	267
202	A three-dimensional simulation of the Antarctic ozone hole: Impact of anthropogenic chlorine on the lower stratosphere and upper troposphere. Journal of Geophysical Research, 1997, 102, 8909-8930.	3.3	61
203	A high resolution global reanalysis highlighting the winter monsoon. Part I, reanalysis fields. Meteorology and Atmospheric Physics, 1997, 64, 123-150.	2.0	35
204	A high resolution global reanalysis highlighting the winter monsoon. Part II: transients and passive tracer transports. Meteorology and Atmospheric Physics, 1997, 64, 151-171.	2.0	16
205	The seasonal cycle of atmospheric CO ₂ : A study based on the NCAR Community Climate Model (CCM2). Journal of Geophysical Research, 1996, 101, 15079-15097.	3.3	36
206	Upwind-weighted advection schemes for ocean tracer transport: An evaluation in a passive tracer context. Journal of Geophysical Research, 1995, 100, 20763.	3.3	45
207	A three-dimensional general circulation model with coupled chemistry for the middle atmosphere. Journal of Geophysical Research, 1995, 100, 9041.	3.3	102
208	Cumulus parameterizations in chemical transport models. Journal of Geophysical Research, 1995, 100, 26173.	3.3	62
209	Water vapor transport in the NCAR CCM2. Tellus, Series A: Dynamic Meteorology and Oceanography, 1994, 46, 34-51.	1.7	62
210	Conservative Shape-Preserving Two-Dimensional Transport on a Spherical Reduced Grid. Monthly Weather Review, 1994, 122, 1337-1350.	1.4	86
211	Water vapor transport in the NCAR CCM2. Tellus, Series A: Dynamic Meteorology and Oceanography, 1994, 46, 34-51.	1.7	63
212	The impact of high altitude aircraft on the ozone layer in the stratosphere. Journal of Atmospheric Chemistry, 1994, 18, 103-128.	3.2	23
213	A three-dimensional transport model for the middle atmosphere. Journal of Geophysical Research, 1994, 99, 999.	3.3	36
214	Examination of tracer transport in the NCAR CCM2 by comparison of CFCl ₃ simulations with ALE/GAGE observations. Journal of Geophysical Research, 1994, 99, 12885.	3.3	27
215	Climate statistics from the National Center for Atmospheric Research community climate model CCM2. Journal of Geophysical Research, 1994, 99, 20785.	3.3	77
216	Maintenance of the Intertropical Convergence Zones and the Large-Scale Tropical Circulation on a Water-covered Earth. Journals of the Atmospheric Sciences, 1993, 50, 691-713.	1.7	99

#	ARTICLE	IF	CITATIONS
217	The sensitivity of a general circulation model climate to the moisture transport formulation. Journal of Geophysical Research, 1991, 96, 13123-13137.	3.3	43
218	Monotone Advection on the Sphere: An Eulerian Versus Semi-Lagrangian Approach. Journals of the Atmospheric Sciences, 1991, 48, 793-810.	1.7	73
219	Computational aspects of moisture transport in global models of the atmosphere. Quarterly Journal of the Royal Meteorological Society, 1990, 116, 1071-1090.	2.7	204
220	On Shape-Preserving Interpolation and Semi-Lagrangian Transport. SIAM Journal on Scientific and Statistical Computing, 1990, 11, 656-687.	1.5	93
221	Computational aspects of moisture transport in global models of the atmosphere. Quarterly Journal of the Royal Meteorological Society, 1990, 116, 1071-1090.	2.7	1
222	Two-Dimensional Semi-Lagrangian Transport with Shape-Preserving Interpolation. Monthly Weather Review, 1989, 117, 102-129.	1.4	314
223	Cumulus Initialization in a Global Model for Numerical Weather Prediction. Monthly Weather Review, 1989, 117, 2654-2671.	1.4	12
224	A comparison of various normal-mode initialization schemes and the inclusion of diabatic processes. Tellus, Series A: Dynamic Meteorology and Oceanography, 1988, 40A, 1-25.	1.7	6
225	Toward atmospheres without tops: Absorbing upper boundary conditions for numerical models. Quarterly Journal of the Royal Meteorological Society, 1986, 112, 1195-1218.	2.7	29
226	Developments in Normal Mode Initialization Part I: A Simple Interpretation for Normal Mode Initialization. Monthly Weather Review, 1985, 113, 1746-1752.	1.4	2
227	Developments in Normal Mode Initialization. Part II: A New Method and its Comparison with Currently Used Schemes. Monthly Weather Review, 1985, 113, 1753-1770.	1.4	19