B Stevens

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8997851/publications.pdf

Version: 2024-02-01

239 papers	32,818 citations	6840 81 h-index	5347 170 g-index
251 all docs	251 docs citations	251 times ranked	25801 citing authors

#	Article	IF	Citations
1	Global variability in radiative-convective equilibrium with a slab ocean under a wide range of CO2 concentrations. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 72, 1699387.	0.8	6
2	VELOX â€“ a new thermal infrared imager for airborne remote sensing of cloud and surface properties. Atmospheric Measurement Techniques, 2022, 15, 1491-1509.	1.2	3
3	The ICON Earth System Model Version 1.0. Journal of Advances in Modeling Earth Systems, 2022, 14, .	1.3	16
4	Thank You to Our 2021 Peer Reviewers. AGU Advances, 2022, 3, .	2.3	0
5	A digital twin of Earth for the green transition. Nature Climate Change, 2021, 11, 80-83.	8.1	158
6	Ship- and island-based atmospheric soundings from the 2020 EUREC⁴A field campaign. Earth System Science Data, 2021, 13, 491-514.	3.7	26
7	Confronting Racism to Advance Our Science. AGU Advances, 2021, 2, e2020AV000296.	2.3	1
8	Thank You to Our 2020 Peer Reviewers. AGU Advances, 2021, 2, e2021AV000426.	2.3	0
9	How Rossby wave breaking modulates the water cycle in the North Atlantic trade wind region. Weather and Climate Dynamics, 2021, 2, 281-309.	1.2	17
10	Dependence of Climate Sensitivity on the Given Distribution of Relative Humidity. Geophysical Research Letters, 2021, 48, e2021GL092462.	1.5	16
11	Convective selfâ€“aggregation in a mean flow. Atmospheric Chemistry and Physics, 2021, 21, 10337-10345.	1.9	1
12	Measuring Shallow Convective Mass Flux Profiles in the Trade Wind Region. Journals of the Atmospheric Sciences, 2021, 78, 3205-3214.	0.6	6
13	EUREC⁴A. Earth System Science Data, 2021, 13, 4067-4119.	3.7	88
14	Characterization and Evolution of Organized Shallow Convection in the Downstream North Atlantic Trades. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034575.	1.2	27
15	Earthâ€™s Albedo and Its Symmetry. AGU Advances, 2021, 2, e2021AV000440.	2.3	18
16	Variations of Tropical Lapse Rates in Climate Models and their Implications for Upper Tropospheric Warming. Journal of Climate, 2021, , 1-50.	1.2	7
17	Changes in the Tropical Lapse Rate due to Entrainment and Their Impact on Climate Sensitivity. Geophysical Research Letters, 2021, 48, e2021GL094969.	1.5	4
18	Visualization of Climate Science Simulation Data. IEEE Computer Graphics and Applications, 2021, 41, 42-48.	1.0	1

#	Article	IF	Citations
19	Tropical Cyclones in Global Storm-Resolving Models. Journal of the Meteorological Society of Japan, 2021, 99, 579-602.	0.7	28
20	Tropical Freeâ€Tropospheric Humidity Differences and Their Effect on the Clearâ€Sky Radiation Budget in Global Stormâ€Resolving Models. Journal of Advances in Modeling Earth Systems, 2021, 13, .	1.3	8
21	Temperatureâ€Dependence of the Clearâ€Sky Feedback in Radiativeâ€Convective Equilibrium. Geophysical Research Letters, 2021, 48, .	1.5	8
22	JOANNE: Joint dropsonde Observations of the Atmosphere in tropical North atlaNtic meso-scale Environments. Earth System Science Data, 2021, 13, 5253-5272.	3.7	27
23	EUREC⁴A's <i>HALO</i>. Earth System Science Data, 2021, 13, 5545-5563.	3.7	24
24	Bounding Global Aerosol Radiative Forcing of Climate Change. Reviews of Geophysics, 2020, 58, e2019RG000660.	9.0	424
25	Sugar, gravel, fish and flowers: Mesoscale cloud patterns in the trade winds. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 141-152.	1.0	78
26	Influence of deepening and mesoscale organization of shallow convection on stratiform cloudiness in the downstream trades. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 174-185.	1.0	13
27	Clouds and Convective Selfâ€Aggregation in a Multimodel Ensemble of Radiativeâ€Convective Equilibrium Simulations. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002138.	1.3	86
28	Linking Largeâ€Eddy Simulations to Local Cloud Observations. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002209.	1.3	9
29	Historical, Philosophical, and Sociological Perspectives on Earth System Modeling. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002139.	1.3	2
30	Thank You to Our 2019 Reviewers. AGU Advances, 2020, 1, e2020AV000181.	2.3	0
31	Mesoscale marine tropical precipitation varies independently from the spatial arrangement of its convective cells. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 1391-1402.	1.0	9
32	AGU Advances Goes Online. AGU Advances, 2020, 1, e2019AV000105.	2.3	0
33	Simulated Tropical Precipitation Assessed across Three Major Phases of the Coupled Model Intercomparison Project (CMIP). Monthly Weather Review, 2020, 148, 3653-3680.	0.5	92
34	Climate Statistics in Global Simulations of the Atmosphere, from 80 to 2.5 km Grid Spacing. Journal of the Meteorological Society of Japan, 2020, 98, 73-91.	0.7	55
35	The Added Value of Large-eddy and Storm-resolving Models for Simulating Clouds and Precipitation. Journal of the Meteorological Society of Japan, 2020, 98, 395-435.	0.7	93
36	What could we learn about climate sensitivity from variability in the surface temperature record?. Earth System Dynamics, 2020, 11, 709-719.	2.7	3

#	Article	IF	Citations
37	A Standardized Atmospheric Measurement Data Archive for Distributed Cloud and Precipitation Process-Oriented Observations in Central Europe. Bulletin of the American Meteorological Society, 2019, 100, 1299-1314.	1.7	6
38	A Moist Conceptual Model for the Boundary Layer Structure and Radiatively Driven Shallow Circulations in the Trades. Journals of the Atmospheric Sciences, 2019, 76, 1289-1306.	0.6	23
39	Re-Examining the First Climate Models: Climate Sensitivity of a Modern Radiativeâ€“Convective Equilibrium Model. Journal of Climate, 2019, 32, 8111-8125.	1.2	27
40	A New Perspective for Future Precipitation Change from Intense Extratropical Cyclones. Geophysical Research Letters, 2019, 46, 12435-12444.	1.5	19
41	A High-Altitude Long-Range Aircraft Configured as a Cloud Observatory: The NARVAL Expeditions. Bulletin of the American Meteorological Society, 2019, 100, 1061-1077.	1.7	47
42	First forcing estimates from the future CMIP6 scenarios of anthropogenic aerosol optical properties and an associated Twomey effect. Geoscientific Model Development, 2019, 12, 989-1007.	1.3	27
43	Global Cloud-Resolving Models. Current Climate Change Reports, 2019, 5, 172-184.	2.8	164
44	The Max Planck Institute Grand Ensemble: Enabling the Exploration of Climate System Variability. Journal of Advances in Modeling Earth Systems, 2019, 11, 2050-2069.	1.3	288
45	Developments in the MPIâ€M Earth System Model version 1.2 (MPIâ€ESM1.2) and Its Response to Increasing CO₂. Journal of Advances in Modeling Earth Systems, 2019, 11, 998-1038.	1.3	582
46	Assessing the scales in numerical weather and climate predictions: will exascale be the rescue?. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180148.	1.6	48
47	Deep learning and process understanding for data-driven Earth system science. Nature, 2019, 566, 195-204.	13.7	2,176
48	A New Look at the Daily Cycle of Trade Wind Cumuli. Journal of Advances in Modeling Earth Systems, 2019, 11, 3148-3166.	1.3	48
49	The scientific challenge of understanding and estimating climate change. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 24390-24395.	3.3	96
50	Measuring Area-Averaged Vertical Motions with Dropsondes. Journals of the Atmospheric Sciences, 2019, 76, 767-783.	0.6	50
51	Tropics as Tempest. , 2019, , 299-310.		2
52	DYAMOND: the DYnamics of the Atmospheric general circulation Modeled On Non-hydrostatic Domains. Progress in Earth and Planetary Science, 2019, 6, .	1.1	239
53	A unified data set of airborne cloud remote sensing using the HALO Microwave Package (HAMP). Earth System Science Data, 2019, 11, 921-934.	3.7	18
54	Estimating Bulk Entrainment With Unaggregated and Aggregated Convection. Geophysical Research Letters, 2018, 45, 455-462.	1.5	41

#	Article	IF	Citations
55	The Impact of Vertical Mixing Biases in Largeâ€Eddy Simulation on Nocturnal Low Clouds. Journal of Advances in Modeling Earth Systems, 2018, 10, 1290-1303.	1.3	6
56	A Workshop on Remote Sensing of the Atmosphere in Anticipation of the EarthCARE Satellite Mission. Bulletin of the American Meteorological Society, 2018, 99, ES195-ES198.	1.7	2
57	ICONâ€A, The Atmosphere Component of the ICON Earth System Model: II. Model Evaluation. Journal of Advances in Modeling Earth Systems, 2018, 10, 1638-1662.	1.3	44
58	Reply to â€œComments on â€˜Rethinking the Lower Bound on Aerosol Radiative Forcingâ€™â€•. Journal of Climate, 2018, 31, 9413-9416.	1.2	1
59	Observing the Tropical Atmosphere in Moisture Space. Journals of the Atmospheric Sciences, 2018, 75, 3313-3330.	0.6	17
60	The climate of a retrograde rotating Earth. Earth System Dynamics, 2018, 9, 1191-1215.	2.7	21
61	DNS and LES for Simulating Stratocumulus: Better Together. Journal of Advances in Modeling Earth Systems, 2018, 10, 1421-1438.	1.3	49
62	The Signature of Shallow Circulations, Not Cloud Radiative Effects, in the Spatial Distribution of Tropical Precipitation. Journal of Climate, 2018, 31, 9489-9505.	1.2	11
63	The role of the permanent wilting point in controlling the spatial distribution of precipitation. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5692-5697.	3.3	35
64	Radiativeâ€“convective equilibrium model intercomparison project. Geoscientific Model Development, 2018, 11, 793-813.	1.3	127
65	ICONâ€A, the Atmosphere Component of the ICON Earth System Model: I. Model Description. Journal of Advances in Modeling Earth Systems, 2018, 10, 1613-1637.	1.3	123
66	The influence of internal variability on Earth's energy balance framework and implications for estimating climate sensitivity. Atmospheric Chemistry and Physics, 2018, 18, 5147-5155.	1.9	40
67	Sensitivity of the summertime tropical Atlantic precipitation distribution to convective parameterization and model resolution in ECHAM6. Journal of Geophysical Research D: Atmospheres, 2017, 122, 2579-2594.	1.2	9
68	Imprint of the convective parameterization and seaâ€surface temperature on largeâ€scale convective selfâ€aggregation. Journal of Advances in Modeling Earth Systems, 2017, 9, 1488-1505.	1.3	54
69	Clouds unfazed by haze. Nature, 2017, 546, 483-484.	13.7	8
70	Preface to the Special Issue â€œISSI Workshop on Shallow Clouds and Water Vapor, Circulation and Climate Sensitivityâ€•. Surveys in Geophysics, 2017, 38, 1171-1172.	2.1	1
71	Mechanisms and Model Diversity of Trade-Wind Shallow Cumulus Cloud Feedbacks: A Review. Surveys in Geophysics, 2017, 38, 1331-1353.	2.1	48
72	Structure and Dynamical Influence of Water Vapor in the Lower Tropical Troposphere. Surveys in Geophysics, 2017, 38, 1371-1397.	2.1	53

#	Article	IF	Citations
73	Rediscovery of the doldrums in storm-resolving simulations over the tropical Atlantic. Nature Geoscience, 2017, 10, 891-896.	5.4	76
74	Largeâ€eddy simulations over Germany using ICON: a comprehensive evaluation. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 69-100.	1.0	175
75	CMIP5 Scientific Gaps and Recommendations for CMIP6. Bulletin of the American Meteorological Society, 2017, 98, 95-105.	1.7	207
76	Fast and slow shifts of the zonalâ€mean intertropical convergence zone in response to an idealized anthropogenic aerosol. Journal of Advances in Modeling Earth Systems, 2017, 9, 870-892.	1.3	33
77	EUREC4A: A Field Campaign to Elucidate the Couplings Between Clouds, Convection and Circulation. Surveys in Geophysics, 2017, 38, 1529-1568.	2.1	132
78	Evaluation of large-eddy simulations forced with mesoscale model output for a multi-week period during a measurement campaign. Atmospheric Chemistry and Physics, 2017, 17, 7083-7109.	1.9	39
79	Vertical Resolution Refinement in an Aquaâ€Planet and Its Effect on the ITCZ. Journal of Advances in Modeling Earth Systems, 2017, 9, 2425-2436.	1.3	11
80	On the sensitivity of anthropogenic aerosol forcing to modelâ€internal variability and parameterizing a <scp>T</scp>womey effect. Journal of Advances in Modeling Earth Systems, 2017, 9, 1325-1341.	1.3	35
81	MACv2-SP: a parameterization of anthropogenic aerosol optical properties and an associated Twomey effect for use in CMIP6. Geoscientific Model Development, 2017, 10, 433-452.	1.3	130
82	The Cloud Feedback Model Intercomparison Project (CFMIP) contribution to CMIP6. Geoscientific Model Development, 2017, 10, 359-384.	1.3	186
83	Reply to â€œComment on â€˜Rethinking the Lower Bound on Aerosol Radiative Forcingâ€™â€• Journal of Climate, 2017, 30, 6585-6589.	1.2	4
84	Structure and Dynamical Influence of Water Vapor in the Lower Tropical Troposphere. Space Sciences Series of ISSI, 2017, , 199-225.	0.0	7
85	Easy Volcanic Aerosol (EVA v1.0): an idealized forcing generator for climate simulations. Geoscientific Model Development, 2016, 9, 4049-4070.	1.3	63
86	The Radiative Forcing Model Intercomparison Project (RFMIP): experimental protocol for CMIP6. Geoscientific Model Development, 2016, 9, 3447-3460.	1.3	178
87	Overview of the Coupled Model Intercomparison Project Phase 6 (CMIP6) experimental design and organization. Geoscientific Model Development, 2016, 9, 1937-1958.	1.3	5,303
88	Radiative convective equilibrium as a framework for studying the interaction between convection and its largeâ€scale environment. Journal of Advances in Modeling Earth Systems, 2016, 8, 1330-1344.	1.3	28
89	Large-Eddy Simulations of EUCLIPSEâ€“GASS Lagrangian Stratocumulus-to-Cumulus Transitions: Mean State, Turbulence, and Decoupling. Journals of the Atmospheric Sciences, 2016, 73, 2485-2508.	0.6	67
90	Complement and microglia mediate early synapse loss in Alzheimer mouse models. Science, 2016, 352, 712-716.	6.0	2,237

#	Article	IF	Citations
91	Thermodynamic control of anvil cloud amount. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8927-8932.	3.3	172
92	A two Turbulence Kinetic Energy model as a scaleâ€adaptive approach to modeling the planetary boundary layer. Journal of Advances in Modeling Earth Systems, 2016, 8, 224-243.	1.3	10
93	Prospects for narrowing bounds on Earth's equilibrium climate sensitivity. Earth's Future, 2016, 4, 512-522.	2.4	123
94	Coupled radiative convective equilibrium simulations with explicit and parameterized convection. Journal of Advances in Modeling Earth Systems, 2016, 8, 1468-1482.	1.3	73
95	The role of precipitation and spatial organization in the response of tradeâ€wind clouds to warming. Journal of Advances in Modeling Earth Systems, 2016, 8, 843-862.	1.3	56
96	The Barbados Cloud Observatory: Anchoring Investigations of Clouds and Circulation on the Edge of the ITCZ. Bulletin of the American Meteorological Society, 2016, 97, 787-801.	1.7	134
97	Amplification of El NiÃ±o by cloud longwave coupling to atmospheric circulation. Nature Geoscience, 2016, 9, 106-110.	5.4	70
98	Understanding the Intermodel Spread in Global-Mean Hydrological Sensitivity*. Journal of Climate, 2016, 29, 801-817.	1.2	79
99	Response to Comment on â€œThe Atlantic Multidecadal Oscillation without a role for ocean circulationâ€. Science, 2016, 352, 1527-1527.	6.0	40
100	Largeâ€eddy simulation of the transient and nearâ€equilibrium behavior of precipitating shallow convection. Journal of Advances in Modeling Earth Systems, 2015, 7, 1918-1937.	1.3	111
101	Large eddy simulation using the general circulation model <scp>ICON</scp>. Journal of Advances in Modeling Earth Systems, 2015, 7, 963-986.	1.3	136
102	Eurasian winter cooling in the warming hiatus of 1998â€“2012. Geophysical Research Letters, 2015, 42, 8131-8139.	1.5	117
103	The influence of misrepresenting the nocturnal boundary layer on idealized daytime convection in largeâ€eddy simulation. Journal of Advances in Modeling Earth Systems, 2015, 7, 423-436.	1.3	20
104	The effect of atmospheric radiative heating by clouds on the <scp>M</scp>addenâ€<scp>J</scp>ulian <scp>O</scp>scillation. Journal of Advances in Modeling Earth Systems, 2015, 7, 854-864.	1.3	54
105	The Signature of Aerosols and Meteorology in Long-Term Cloud Radar Observations of Trade Wind Cumuli. Journals of the Atmospheric Sciences, 2015, 72, 4643-4659.	0.6	17
106	Climate Symposium 2014: Findings and Recommendations. Bulletin of the American Meteorological Society, 2015, 96, ES145-ES147.	1.7	4
107	Controlling entrainment in the smoke cloud using level set-based front tracking. Meteorologische Zeitschrift, 2015, 23, 661-674.	0.5	2
108	Adjustments in the Forcing-Feedback Framework for Understanding Climate Change. Bulletin of the American Meteorological Society, 2015, 96, 217-228.	1.7	239

#	Article	IF	Citations
109	The Influence of Cloud Feedbacks on Equatorial Atlantic Variability. Journal of Climate, 2015, 28, 2725-2744.	1.2	46
110	Evaluating Light Rain from Satellite- and Ground-Based Remote Sensing Data over the Subtropical North Atlantic. Journal of Applied Meteorology and Climatology, 2015, 54, 556-572.	0.6	12
111	On the Seasonal and Synoptic Time-Scale Variability of the North Atlantic Trade Wind Region and Its Low-Level Clouds. Journals of the Atmospheric Sciences, 2015, 72, 1428-1446.	0.6	50
112	Missing iris effect as a possible cause of muted hydrological change and high climate sensitivity in models. Nature Geoscience, 2015, 8, 346-351.	5.4	171
113	The Atlantic ITCZ bias in CMIP5 models. Climate Dynamics, 2015, 45, 1169-1180.	1.7	55
114	Rethinking the Lower Bound on Aerosol Radiative Forcing. Journal of Climate, 2015, 28, 4794-4819.	1.2	175
115	Clouds, circulation and climate sensitivity. Nature Geoscience, 2015, 8, 261-268.	5.4	647
116	The Atlantic Multidecadal Oscillation without a role for ocean circulation. Science, 2015, 350, 320-324.	6.0	287
117	On the connection between tropical circulation, convective mixing, and climate sensitivity. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 1404-1416.	1.0	36
118	The diurnal cycle of marine cloud feedback in climate models. Climate Dynamics, 2015, 44, 1419-1436.	1.7	18
119	Using aquaplanets to understand the robust responses of comprehensive climate models to forcing. Climate Dynamics, 2015, 44, 1957-1977.	1.7	79
120	Compensation of Hemispheric Albedo Asymmetries by Shifts of the ITCZ and Tropical Clouds. Journal of Climate, 2014, 27, 1029-1045.	1.2	52
121	Wind Shear and Buoyancy Reversal at the Top of Stratocumulus. Journals of the Atmospheric Sciences, 2014, 71, 1040-1057.	0.6	31
122	HAMP â€“ the microwave package on the High Altitude and LOng range research aircraft (HALO). Atmospheric Measurement Techniques, 2014, 7, 4539-4553.	1.2	50
123	Climate and climate sensitivity to changing <scp>CO</scp>₂ on an idealized land planet. Journal of Advances in Modeling Earth Systems, 2014, 6, 1205-1223.	1.3	26
124	Climate Model Intercomparisons: Preparing for the Next Phase. Eos, 2014, 95, 77-78.	0.1	129
125	Origins of the Solar Radiation Biases over the Southern Ocean in CFMIP2 Models*. Journal of Climate, 2014, 27, 41-56.	1.2	227
126	The radiative impact of clouds on the shift of the Intertropical Convergence Zone. Geophysical Research Letters, 2014, 41, 4308-4315.	1.5	61

#	Article	IF	Citations
127	Simulating the Role of Subtropical Stratocumulus Clouds in Driving Pacific Climate Variability. Journal of Climate, 2014, 27, 5119-5131.	1.2	50
128	The distribution and variability of lowâ€level cloud in the North Atlantic trades. Quarterly Journal of the Royal Meteorological Society, 2014, 140, 2364-2374.	1.0	75
129	Study of low-order numerical effects in the two-dimensional cloud-top mixing layer. Theoretical and Computational Fluid Dynamics, 2013, 27, 239-251.	0.9	2
130	Climate feedback efficiency and synergy. Climate Dynamics, 2013, 41, 2539-2554.	1.7	54
131	Assessment of different metrics for physical climate feedbacks. Climate Dynamics, 2013, 41, 1173-1185.	1.7	23
132	Preconditioning Deep Convection with Cumulus Congestus. Journals of the Atmospheric Sciences, 2013, 70, 448-464.	0.6	103
133	Reply to â€œComments on â€˜Preconditioning Deep Convection with Cumulus Congestusâ€™â€• Journals of the Atmospheric Sciences, 2013, 70, 4155-4156.	0.6	3
134	Time Scales of the Trade Wind Boundary Layer Adjustment. Journals of the Atmospheric Sciences, 2013, 70, 1071-1083.	0.6	16
135	The Observed Hemispheric Symmetry in Reflected Shortwave Irradiance. Journal of Climate, 2013, 26, 468-477.	1.2	62
136	Energy budget constraints on climate response. Nature Geoscience, 2013, 6, 415-416.	5.4	270
137	Water in the atmosphere. Physics Today, 2013, 66, 29-34.	0.3	89
138	The Maddenâ€“Julian Oscillation in ECHAM6 and the Introduction of an Objective MJO Metric. Journal of Climate, 2013, 26, 3241-3257.	1.2	62
139	Scale Dependency of Total Water Variance and Its Implication for Cloud Parameterizations. Journals of the Atmospheric Sciences, 2013, 70, 3615-3630.	0.6	24
140	CHASER: An Innovative Satellite Mission Concept to Measure the Effects of Aerosols on Clouds and Climate. Bulletin of the American Meteorological Society, 2013, 94, 685-694.	1.7	15
141	Controls on and impacts of the diurnal cycle of deep convective precipitation. Journal of Advances in Modeling Earth Systems, 2013, 5, 801-815.	1.3	22
142	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
143	Atmospheric component of the MPIâ€M Earth System Model: ECHAM6. Journal of Advances in Modeling Earth Systems, 2013, 5, 146-172.	1.3	1,044
144	Paths to accuracy for radiation parameterizations in atmospheric models. Journal of Advances in Modeling Earth Systems, 2013, 5, 225-233.	1.3	77

#	Article	IF	Citations
145	MACâ€v1: A new global aerosol climatology for climate studies. Journal of Advances in Modeling Earth Systems, 2013, 5, 704-740.	1.3	198
146	Climate and carbon cycle changes from 1850 to 2100 in MPIâ€ESM simulations for the Coupled Model Intercomparison Project phase 5. Journal of Advances in Modeling Earth Systems, 2013, 5, 572-597.	1.3	1,280
147	Maddenâ€Julian oscillation as simulated by the MPI Earth System Model: Over the last and into the next millennium. Journal of Advances in Modeling Earth Systems, 2013, 5, 71-84.	1.3	25
148	Climate and climate change in a radiativeâ€convective equilibrium version of ECHAM6. Journal of Advances in Modeling Earth Systems, 2013, 5, 1-14.	1.3	145
149	What Are Climate Models Missing?. Science, 2013, 340, 1053-1054.	6.0	333
150	The fine-scale structure of the trade wind cumuli over Barbados â€“ an introduction to the CARRIBA project. Atmospheric Chemistry and Physics, 2013, 13, 10061-10077.	1.9	61
151	Marine Boundary Layer Cloud Feedbacks in a Constant Relative Humidity Atmosphere. Journals of the Atmospheric Sciences, 2012, 69, 2538-2550.	0.6	159
152	The Influence of Wind Speed on Shallow Marine Cumulus Convection. Journals of the Atmospheric Sciences, 2012, 69, 168-184.	0.6	50
153	Using the Sensitivity of Large-Eddy Simulations to Evaluate Atmospheric Boundary Layer Models. Journals of the Atmospheric Sciences, 2012, 69, 1582-1601.	0.6	30
154	The aerosol effect. Nature, 2012, 490, 40-41.	13.7	29
155	Tuning the climate of a global model. Journal of Advances in Modeling Earth Systems, 2012, 4, .	1.3	334
156	Factors controlling the position of the Intertropical Convergence Zone on an aquaplanet. Journal of Advances in Modeling Earth Systems, 2012, 4, .	1.3	110
157	Observing and Modeling Earthâ€™s Energy Flows. Surveys in Geophysics, 2012, 33, 779-816.	2.1	77
158	Controls on precipitation and cloudiness in simulations of trade-wind cumulus as observed during RICO. Journal of Advances in Modeling Earth Systems, 2011, 3, n/a-n/a.	1.3	249
159	Revealing differences in GCM representations of low clouds. Climate Dynamics, 2011, 36, 385-399.	1.7	124
160	Multiscale Asymptotics Analysis for the Mesoscale Dynamics of Cloud-Topped Boundary Layers. Journals of the Atmospheric Sciences, 2011, 68, 379-402.	0.6	5
161	On the Factors Modulating the Stratocumulus to Cumulus Transitions. Journals of the Atmospheric Sciences, 2011, 68, 1865-1881.	0.6	132
162	On the Fidelity of Large-Eddy Simulation of Shallow Precipitating Cumulus Convection. Monthly Weather Review, 2011, 139, 2918-2939.	0.5	79

#	Article	IF	Citations
163	Cloud-top entrainment instability?. Journal of Fluid Mechanics, 2010, 660, 1-4.	1.4	18
164	Interpreting the cloud cover â€“ aerosol optical depth relationship found in satellite data using a general circulation model. Atmospheric Chemistry and Physics, 2010, 10, 6129-6135.	1.9	169
165	On the transitions in marine boundary layer cloudiness. Atmospheric Chemistry and Physics, 2010, 10, 2377-2391.	1.9	83
166	Two-fluid formulation of the cloud-top mixing layer for direct numerical simulation. Theoretical and Computational Fluid Dynamics, 2010, 24, 511-536.	0.9	29
167	Turbulence effects on warm-rain autoconversion in precipitating shallow convection. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 1753-1762.	1.0	54
168	Climate and carbon-cycle variability over the last millennium. Climate of the Past, 2010, 6, 723-737.	1.3	284
169	The Echo Size Distribution of Precipitating Shallow Cumuli. Journals of the Atmospheric Sciences, 2010, 67, 788-804.	0.6	18
170	Multiscale Models for Cumulus Cloud Dynamics. Journals of the Atmospheric Sciences, 2010, 67, 3269-3285.	0.6	12
171	Microphysical Scaling Relations in a Kinematic Model of Isolated Shallow Cumulus Clouds. Journals of the Atmospheric Sciences, 2010, 67, 1575-1590.	0.6	36
172	Probability density functions in the cloud-top mixing layer. New Journal of Physics, 2010, 12, 085010.	1.2	8
173	Effects of Resolution on the Simulation of Boundaryâ€layer Clouds and the Partition of Kinetic Energy to Subgrid Scales. Journal of Advances in Modeling Earth Systems, 2010, 2, .	1.3	36
174	Lowâ€latitude boundary layer clouds as seen by CALIPSO. Journal of Geophysical Research, 2010, 115, .	3.3	31
175	Large-Eddy Simulations of a Drizzling, Stratocumulus-Topped Marine Boundary Layer. Monthly Weather Review, 2009, 137, 1083-1110.	0.5	208
176	What Controls the Transition from Shallow to Deep Convection?. Journals of the Atmospheric Sciences, 2009, 66, 1793-1806.	0.6	104
177	The Environment of Precipitating Shallow Cumulus Convection. Journals of the Atmospheric Sciences, 2009, 66, 1962-1979.	0.6	109
178	Buoyancy reversal in cloudâ€top mixing layers. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 963-978.	1.0	39
179	Untangling aerosol effects on clouds and precipitation in a buffered system. Nature, 2009, 461, 607-613.	13.7	1,005
180	Monte Carlo Spectral Integration: a Consistent Approximation for Radiative Transfer in Large Eddy Simulations. Journal of Advances in Modeling Earth Systems, 2009, 1, .	1.3	59

#	Article	IF	Citations
181	Low-Cloud Fraction, Lower-Tropospheric Stability, and Large-Scale Divergence. Journal of Climate, 2009, 22, 4827-4844.	1.2	45
182	How important is the vertical structure for the representation of aerosol impacts on the diurnal cycle of marine stratocumulus?. Atmospheric Chemistry and Physics, 2009, 9, 4039-4052.	1.9	25
183	DNS of the turbulent cloud-top mixing layer. Springer Proceedings in Physics, 2009, , 401-404.	0.1	0
184	Application of Dynamic Subgrid-scale Models for Large-eddy Simulation of the Daytime Convective Boundary Layer over Heterogeneous Surfaces. Boundary-Layer Meteorology, 2008, 126, 327-348.	1.2	22
185	Validation of a mixed-layer closure. I: theoretical tests. Quarterly Journal of the Royal Meteorological Society, 2008, 134, 47-55.	1.0	2
186	Aerosol Effects on Clouds, Precipitation, and the Organization of Shallow Cumulus Convection. Journals of the Atmospheric Sciences, 2008, 65, 392-406.	0.6	238
187	Aquaplanets, Climate Sensitivity, and Low Clouds. Journal of Climate, 2008, 21, 4974-4991.	1.2	159
188	The Structure and Mesoscale Organization of Precipitating Stratocumulus. Journals of the Atmospheric Sciences, 2008, 65, 1587-1605.	0.6	163
189	Parameterization of the Atmospheric Boundary Layer: A View from Just Above the Inversion. Bulletin of the American Meteorological Society, 2008, 89, 453-458.	1.7	70
190	On the Growth of Layers of Nonprecipitating Cumulus Convection. Journals of the Atmospheric Sciences, 2007, 64, 2916-2931.	0.6	139
191	Divergence and Vorticity from Aircraft Air Motion Measurements. Journal of Atmospheric and Oceanic Technology, 2007, 24, 2062-2072.	0.5	24
192	In the Driver's Seat: Rico and Education. Bulletin of the American Meteorological Society, 2007, 88, 1929-1938.	1.7	13
193	On the Structure of the Lower Troposphere in the Summertime Stratocumulus Regime of the Northeast Pacific. Monthly Weather Review, 2007, 135, 985-1005.	0.5	50
194	Impact Mechanisms of Shallow Cumulus Convection on Tropical Climate Dynamics*. Journal of Climate, 2007, 20, 2623-2642.	1.2	85
195	Rain in Shallow Cumulus Over the Ocean: The RICO Campaign. Bulletin of the American Meteorological Society, 2007, 88, 1912-1928.	1.7	363
196	Variance scaling in shallowâ€cumulusâ€topped mixed layers. Quarterly Journal of the Royal Meteorological Society, 2007, 133, 1629-1641.	1.0	19
197	Accumulation mode aerosol, pockets of open cells, and particle nucleation in the remote subtropical Pacific marine boundary layer. Journal of Geophysical Research, 2006, 111, .	3.3	88
198	Principal Component Analysis of the Summertime Winds over the Gulf of California: A Gulf Surge Index. Monthly Weather Review, 2006, 134, 3395-3414.	0.5	40

#	Article	IF	Citations
199	A simple equilibrium model for shallow-cumulus-topped mixed layers. Theoretical and Computational Fluid Dynamics, 2006, 20, 305-322.	0.9	62
200	Bulk boundary-layer concepts for simplified models of tropical dynamics. Theoretical and Computational Fluid Dynamics, 2006, 20, 279-304.	0.9	101
201	A Large-Eddy Simulation Study of Anisotropy in Fair-Weather Cumulus Cloud Fields. Journals of the Atmospheric Sciences, 2005, 62, 2155-2171.	0.6	22
202	On Bulk Models of Shallow Cumulus Convection. Journals of the Atmospheric Sciences, 2005, 62, 3286-3302.	0.6	12
203	Where is the Interface of the Stratocumulus-Topped PBL?. Journals of the Atmospheric Sciences, 2005, 62, 2626-2631.	0.6	38
204	Observations of Entrainment in Eastern Pacific Marine Stratocumulus Using Three Conserved Scalars. Journals of the Atmospheric Sciences, 2005, 62, 3268-3285.	0.6	132
205	Observations of the Structure of Heavily Precipitating Marine Stratocumulus. Journals of the Atmospheric Sciences, 2005, 62, 4327-4342.	0.6	72
206	Evaluation of Large-Eddy Simulations via Observations of Nocturnal Marine Stratocumulus. Monthly Weather Review, 2005, 133, 1443-1462.	0.5	519
207	On the diurnal cycle and susceptibility to aerosol concentration in a stratocumulus-topped mixed layer. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 1567-1583.	1.0	36
208	POCKETS OF OPEN CELLS AND DRIZZLE IN MARINE STRATOCUMULUS. Bulletin of the American Meteorological Society, 2005, 86, 51-58.	1.7	236
209	Observations of Drizzle in Nocturnal Marine Stratocumulus. Journals of the Atmospheric Sciences, 2005, 62, 88-106.	0.6	201
210	What Controls the Mean Depth of the PBL?. Journal of Climate, 2005, 18, 3157-3172.	1.2	121
211	Evaluation of the aerosol indirect effect in marine stratocumulus clouds: Droplet number, size, liquid water path, and radiative impact. Journal of Geophysical Research, 2005, 110, .	3.3	144
212	ATMOSPHERIC MOIST CONVECTION. Annual Review of Earth and Planetary Sciences, 2005, 33, 605-643.	4.6	244
213	Intercomparison and Interpretation of Single-Column Model Simulations of a Nocturnal Stratocumulus-Topped Marine Boundary Layer. Monthly Weather Review, 2005, 133, 2741-2758.	0.5	74
214	Countergradient Fluxes of Conserved Variables in the Clear convective and Stratocumulus-topped Boundary Layer: The role of the Entrainment Flux. Boundary-Layer Meteorology, 2004, 112, 179-196.	1.2	15
215	The low-level circulation of the North American Monsoon as revealed by QuikSCAT. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	53
216	On entrainment rates in nocturnal marine stratocumulus. Quarterly Journal of the Royal Meteorological Society, 2003, 129, 3469-3493.	1.0	143

#	Article	IF	Citations
217	Dynamics and Chemistry of Marine Stratocumulusâ€"DYCOMS-II. Bulletin of the American Meteorological Society, 2003, 84, 579-594.	1.7	209
218	Large-eddy simulation of the diurnal cycle of shallow cumulus convection over land. Quarterly Journal of the Royal Meteorological Society, 2002, 128, 1075-1093.	1.0	269
219	Entrainment in stratocumulus-topped mixed layers. Quarterly Journal of the Royal Meteorological Society, 2002, 128, 2663-2690.	1.0	152
220	Observations, Experiments, and Large Eddy Simulation. Bulletin of the American Meteorological Society, 2001, 82, 283-294.	1.7	57
221	Efficient computation of vapor and heat diffusion between hydrometeors in a numerical model. Atmospheric Research, 2000, 53, 171-183.	1.8	60
222	Cloud transitions and decoupling in shear-free stratocumulus-topped boundary layers. Geophysical Research Letters, 2000, 27, 2557-2560.	1.5	65
223	An intercomparison of radiatively driven entrainment and turbulence in a smoke cloud, as simulated by different numerical models. Quarterly Journal of the Royal Meteorological Society, 1999, 125, 391-423.	1.0	159
224	A GCSS Boundary-Layer Cloud Model Intercomparison Study Of The First Astex Lagrangian Experiment. Boundary-Layer Meteorology, 1999, 93, 341-380.	1.2	92
225	On the relationship among cloud turbulence, droplet formation and drizzle as viewed by Doppler radar, microwave radiometer and lidar. Journal of Geophysical Research, 1999, 104, 22195-22203.	3.3	25
226	Large-Eddy Simulations of Radiatively Driven Convection: Sensitivities to the Representation of Small Scales. Journals of the Atmospheric Sciences, 1999, 56, 3963-3984.	0.6	155
227	An intercomparison of radiatively driven entrainment and turbulence in a smoke cloud, as simulated by different numerical models. , 1999, 125, 391.		3
228	Simulations of marine stratocumulus using a new microphysical parameterization scheme. Atmospheric Research, 1998, 47-48, 505-528.	1.8	119
229	A critique of one- and two-dimensional models of boundary layer clouds with a binned representations of drop microphysics. Atmospheric Research, 1998, 47-48, 529-553.	1.8	34
230	Large-Eddy Simulations of Strongly Precipitating, Shallow, Stratocumulus-Topped Boundary Layers. Journals of the Atmospheric Sciences, 1998, 55, 3616-3638.	0.6	229
231	Structure of the Entrainment Zone Capping the Convective Atmospheric Boundary Layer. Journals of the Atmospheric Sciences, 1998, 55, 3042-3064.	0.6	305
232	A modeling study of the effect of drizzle on cloud optical depth and susceptibility. Journal of Geophysical Research, 1997, 102, 13527-13534.	3.3	55
233	Comments on â€˜on largeâ€scale circulations in convecting atmospheresâ€™ by Kerry A. Emanuel, J. David Neelin and Christopher S. Bretherton (july B, 1994, 120, 1111â€1143). Quarterly Journal of the Royal Meteorological Society, 1997, 123, 1771-1778.	1.0	15
234	Simulation of a Stratocumulus-Topped Planetary Boundary Layer: Intercomparison among Different Numerical Codes. Bulletin of the American Meteorological Society, 1996, 77, 261-278.	1.7	146

#	Article	IF	Citations
235	Numerical simulations of stratocumulus processing of cloud condensation nuclei through collision-coalescence. Journal of Geophysical Research, 1996, 101, 21391-21402.	3.3	115
236	Elements of the Microphysical Structure of Numerically Simulated Nonprecipitating Stratocumulus. Journals of the Atmospheric Sciences, 1996, 53, 980-1006.	0.6	169
237	Effects of Aerosol and Horizontal Inhomogeneity on the Broadband Albedo of Marine Stratus: Numerical Simulations. Journals of the Atmospheric Sciences, 1996, 53, 3757-3769.	0.6	18
238	The Relationship between Drop In-Cloud Residence Time and Drizzle Production in Numerically Simulated Stratocumulus Clouds. Journals of the Atmospheric Sciences, 1996, 53, 1108-1122.	0.6	103
239	An explicit cloud microphysics/LES model designed to simulate the Twomey effect. Atmospheric Research, 1994, 33, 207-233.	1.8	78