Masaki Satoh

List of Publications by Year
in descending order

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231	9,995	41344	42399
papers	citations	49 h-index	92 g-index

262	262	262	6633
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hadley circulations and their rÃ´les in the global angular momentum budget in two- and three-dimensional models. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 47, 548.	1.7	5
2	Relation between the meridional distribution of potential vorticity and the Lagrangian mean circulation in the troposphere. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 51, 833.	1.7	2
3	Assessments of Doppler Velocity Errors of EarthCARE Cloud Profiling Radar Using Global Cloud System Resolving Simulations: Effects of Doppler Broadening and Folding. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-9.	6.3	13
4	Enhancing data assimilation of GPM observations. , 2022, , 787-804.		0
5	Response of convective systems to the orbital forcing of the last interglacial in a global nonhydrostatic atmospheric model with and without a convective parameterization. Climate Dynamics, 2022, 59, 1617-1648.	3.8	3
6	1980å¹´ä»¥é™ã«æ—¥æœ¬ä¸å®éƒ¨ã®æ²¿å²¸ã«è¥²æ¥ã—ãŸç†±å¸¯ä½Žæ°—åœ§ã•é«˜æ½®ãƒã‚¶ãƒ¼ãƒ‰ã®å‰åŒ Journal of the Mete	1.8	6
7	2021 JMSJ Award. Journal of the Meteorological Society of Japan, 2022, 100, 4-4.	1.8	0
8	Projection of high clouds and its link to ice hydrometeors: An approach using long-term global cloud-system resolving simulations. Journal of Climate, 2022, , 1-59.	3.2	1
9	Sensitivity of the Horizontal Scale of Convective Selfâ€Aggregation to Sea Surface Temperature in Radiative Convective Equilibrium Experiments Using a Global Nonhydrostatic Model. Journal of Advances in Modeling Earth Systems, 2022, 14, .	3.8	5
10	Possible Roles of the Sea Surface Temperature Warming of the Pacific Meridional Mode and the Indian Ocean Warming on Tropical Cyclone Genesis over the North Pacific for the Super El NiÃ±o in 2015. Journal of the Meteorological Society of Japan, 2022, 100, 767-782.	1.8	2
11	Cloud Microphysics in Global Cloud Resolving Models. Atmosphere - Ocean, 2022, 60, 477-505.	1.6	7
12	On the Semidiurnal Variation in Surface Rainfall Rate over the Tropics in a Global Cloud-Resolving Model Simulation and Satellite Observations. Journal of the Meteorological Society of Japan, 2021, 99, 1371-1388.	1.8	4
13	Evaluation of the contribution of tropical cyclone seeds to changes in tropical cyclone frequency due to global warming in high-resolution multi-model ensemble simulations. Progress in Earth and Planetary Science, 2021, 8, .	3.0	30
14	Prediction Skill of the Boreal Summer Intra-Seasonal Oscillation in Global Non-hydrostatic Atmospheric Model Simulations with Explicit Cloud Microphysics. Journal of the Meteorological Society of Japan, 2021, 99, 973-992.	1.8	5
15	ï¼™æœˆã®ç™ºé”ã—ãŸä½Žæ°—åœ§ã«ã‚ˆã‚‹ã‚·ãƒ™ãƒªã‚¢ã‹ã‚‰åŒ—æ¥µåŸŸã¸ã®é»’è‰²ç‚ç´ ã‚¨ã‚¢ãƒã‚¾ãƒ«è¼¸é€ã®å¯¾ã™ã‚‹ãƒ¢ãƒ	1.8	
16	2020 JMSJ Award. Journal of the Meteorological Society of Japan, 2021, 99, 4-4.	1.8	0
17	The Nonhydrostatic ICosahedral Atmospheric Model for CMIP6 HighResMIP simulations (NICAM16-S): experimental design, model description, and impacts of model updates. Geoscientific Model Development, 2021, 14, 795-820.	3.6	28
18	Diversity of the Maddenâ€"Julian Oscillation: Initiation Region Modulated by the Interaction between the Intraseasonal and Interannual Variabilities. Journal of Climate, 2021, 34, 2297-2318.	3.2	4

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19	Regional Energy and Water Budget of a Precipitating Atmosphere over Ocean. Journal of Climate, 2021, 34, 4189-4205.	3.2	6
20	Importance of Pressure Changes in High Cloud Area Feedback Due to Global Warming. Geophysical Research Letters, 2021, 48, e2021GL093646.	4.0	8
21	Improvement of the Cloud Microphysics Scheme of the Mesoscale Model at the Japan Meteorological Agency Using Spaceborne Radar and Microwave Imager of the Global Precipitation Measurement as Reference. Monthly Weather Review, 2021, 149, 3803-3819.	1.4	5
22	Improved Representation of Lowâ€Level Mixedâ€Phase Clouds in a Global Cloudâ€Systemâ€Resolving Simulation. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035223.	3.3	8
23	Climatology of Tropical Cyclone Seed Frequency and Survival Rate in Tropical Cyclones. Geophysical Research Letters, 2021, 48, e2021GL093626.	4.0	4
24	Tropical Cyclones in Global Storm-Resolving Models. Journal of the Meteorological Society of Japan, 2021, 99, 579-602.	1.8	28
25	Intercomparison of Cloud Properties in DYAMOND Simulations over the Atlantic Ocean. Journal of the Meteorological Society of Japan, 2021, 99, 1439-1451.	1.8	12
26	Editorial for the special edition on DYAMOND: The DYnamics of the Atmospheric general circulation Modeled On Non-hydrostatic Domains. Journal of the Meteorological Society of Japan, 2021, 99, 1393-1394.	1.8	0
27	Tropical Cyclones and Climate Change Assessment: Part II: Projected Response to Anthropogenic Warming. Bulletin of the American Meteorological Society, 2020, 101, E303-E322.	3.3	573
28	Clouds and Convective Selfâ€Aggregation in a Multimodel Ensemble of Radiativeâ€Convective Equilibrium Simulations. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002138.	3.8	86
29	Evaluation of Rain Microphysics Using a Radar Simulator and Numerical Models: Comparison of Twoâ€Moment Bulk and Spectral Bin Cloud Microphysics Schemes. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001891.	3.8	5
30	A 1024-Member Ensemble Data Assimilation with 3.5-Km Mesh Global Weather Simulations. , 2020, , .		18
31	Evaluations of the Thermodynamic Phases of Clouds in a Cloud-System-Resolving Model Using CALIPSO and a Satellite Simulator over the Southern Ocean. Journals of the Atmospheric Sciences, 2020, 77, 3781-3801.	1.7	14
32	Response of the Asian Summer Monsoon Precipitation to Global Warming in a High-Resolution Global Nonhydrostatic Model. Journal of Climate, 2020, 33, 8147-8164.	3.2	8
33	Cloud Assumption of Precipitation Retrieval Algorithms for the Dual-Frequency Precipitation Radar. Journal of Atmospheric and Oceanic Technology, 2020, 37, 2015-2031.	1.3	13
34	Precipitation Efficiency and its Role in Cloud-Radiative Feedbacks to Climate Variability. Journal of the Meteorological Society of Japan, 2020, 98, 261-282.	1.8	22
35	Impacts of Sub-grid Ice Cloud Physics in a Turbulence Scheme on High Clouds and their Response to Global Warming. Journal of the Meteorological Society of Japan, 2020, 98, 1069-1081.	1.8	7
36	Impact of Latent Heat Flux Modifications on the Reproduction of a Maddenâ€“Julian Oscillation Event during the 2015 Pre-YMC Campaign Using a Global Cloud-System-Resolving Model. Scientific Online Letters on the Atmosphere, 2020, 16A, 12-18.	1.4	6

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37	Future Changes in the Global Frequency of Tropical Cyclone Seeds. Scientific Online Letters on the Atmosphere, 2020, 16, 70-74.	1.4	33
38	Dynamical Roles of Mixed Rossbyâ€"Gravity Waves in Driving Convective Initiation and Propagation of the Maddenâ€"Julian Oscillation: General Views. Journals of the Atmospheric Sciences, 2020, 77, 4211-4231.	1.7	5
39	å¹³æˆ27å¹´9æœˆé–¢æ±ãƒ»æ±åŒ—è±ªé›¨ã«ãŠã‘ã‚‹å¹³æˆ27å¹´å°é¢¨ç¬¬17å·ï¼ˆKiloï¼‰ã®å½±éŸ¿. Journal of the Meteorological Soci	1.8	0
40	Coupling library Jcup3: its philosophy and application. Progress in Earth and Planetary Science, 2020, 7, .	3.0	6
41	Evaluation of Cloud Liquid Water Database Using Global CloudSystem Resolving Model for GPM/DPR Algorithms. , 2020, , .		1
42	Highâ€Resolution Ensemble Simulations of Intense Tropical Cyclones and Their Internal Variability During the El NiÃ±os of 1997 and 2015. Geophysical Research Letters, 2019, 46, 7592-7601.	4.0	13
43	Observational Evidence of Mixed Rossbyâ€Gravity Waves as a Driving Force for the MJO Convective Initiation and Propagation. Geophysical Research Letters, 2019, 46, 5546-5555.	4.0	15
44	Responses of Clouds and Largeâ€Scale Circulation to Global Warming Evaluated From Multidecadal Simulations Using a Global Nonhydrostatic Model. Journal of Advances in Modeling Earth Systems, 2019, 11, 2980-2995.	3.8	14
45	A New Perspective for Future Precipitation Change from Intense Extratropical Cyclones. Geophysical Research Letters, 2019, 46, 12435-12444.	4.0	19
46	Characteristics of Ice Clouds Over Mountain Regions Detected by CALIPSO and CloudSat Satellite Observations. Journal of Geophysical Research D: Atmospheres, 2019, 124, 10858-10877.	3.3	5
47	Global Cloud-Resolving Models. Current Climate Change Reports, 2019, 5, 172-184.	8.6	164
48	Tropical Cyclones and Climate Change Assessment: Part I: Detection and Attribution. Bulletin of the American Meteorological Society, 2019, 100, 1987-2007.	3.3	326
49	Fine Vertical Resolution Radiativeâ€Convective Equilibrium Experiments: Roles of Turbulent Mixing on the Highâ€Cloud Response to Sea Surface Temperatures. Journal of Advances in Modeling Earth Systems, 2019, 11, 1637-1654.	3.8	23
50	DYAMOND: the DYnamics of the Atmospheric general circulation Modeled On Non-hydrostatic Domains. Progress in Earth and Planetary Science, 2019, 6, .	3.0	239
51	Predictability of Record-Breaking Rainfall in Japan in July 2018: Ensemble Forecast Experiments with the Near-Real-Time Global Atmospheric Data Assimilation System NEXRA. Scientific Online Letters on the Atmosphere, 2019, 15A, 1-7.	1.4	26
52	Impact of Precipitating Ice Hydrometeors on Longwave Radiative Effect Estimated by a Global Cloudâ€System Resolving Model. Journal of Advances in Modeling Earth Systems, 2018, 10, 284-296.	3.8	14
53	The Benefits of Global High Resolution for Climate Simulation: Process Understanding and the Enabling of Stakeholder Decisions at the Regional Scale. Bulletin of the American Meteorological Society, 2018, 99, 2341-2359.	3.3	107
54	Initiation Processes of the Tropical Intraseasonal Variability Simulated in an Aquaâ€Planet Experiment: What is the Intrinsic Mechanism for MJO Onset?. Journal of Advances in Modeling Earth Systems, 2018, 10, 1047-1073.	3.8	17

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55	Roles of Cloud Microphysics on Cloud Responses to Sea Surface Temperatures in Radiativeâ€Convective Equilibrium Experiments Using a Highâ€Resolution Global Nonhydrostatic Model. Journal of Advances in Modeling Earth Systems, 2018, 10, 1970-1989.	3.8	27
56	Toward reduction of the uncertainties in climate sensitivity due to cloud processes using a global non-hydrostatic atmospheric model. Progress in Earth and Planetary Science, 2018, 5, .	3.0	28
57	Radiativeâ€“convective equilibrium model intercomparison project. Geoscientific Model Development, 2018, 11, 793-813.	3.6	127
58	Online Model Parameter Estimation With Ensemble Data Assimilation in the Real Global Atmosphere: A Case With the Nonhydrostatic Icosahedral Atmospheric Model (NICAM) and the Global Satellite Mapping of Precipitation Data. Journal of Geophysical Research D: Atmospheres, 2018, 123, 7375-7392.	3.3	20
59	Extension of a Multisensor Satellite Radiance-Based Evaluation for Cloud System Resolving Models. Journal of the Meteorological Society of Japan, 2018, 96, 55-63.	1.8	10
60	Improving Representation of Tropical Cloud Overlap in GCMs Based on Cloud-Resolving Model Data. Journal of Meteorological Research, 2018, 32, 233-245.	2.4	5
61	Multi-scale Simulations of Atmospheric Pollutants Using a Non-hydrostatic Icosahedral Atmospheric Model. Springer Remote Sensing/photogrammetry, 2018, , 277-302.	0.4	4
62	Analysis of High Radon-222 Concentration Events Using Multi-Horizontal-Resolution NICAM Simulations. Scientific Online Letters on the Atmosphere, 2018, 14, 111-115.	1.4	3
63	Tropical intraseasonal oscillation simulated in an AMIP-type experiment by NICAM. Climate Dynamics, 2017, 48, 2507-2528.	3.8	19
64	Model depiction of the atmospheric flows of radioactive cesium emitted from the Fukushima Daiichi Nuclear Power Station accident. Progress in Earth and Planetary Science, 2017, 4, .	3.0	63
65	Evaluation of summertime surface ozone in Kanto area of Japan using a semi-regional model and observation. Atmospheric Environment, 2017, 153, 163-181.	4.1	20
66	Impact of Lateral Boundary Errors on the Simulation of Clouds with a Nonhydrostatic Regional Climate Model. Monthly Weather Review, 2017, 145, 5059-5082.	1.4	11
67	Response of Tropical Cyclone Activity and Structure to Global Warming in a High-Resolution Global Nonhydrostatic Model. Journal of Climate, 2017, 30, 9703-9724.	3.2	92
68	A Maddenâ€Julian Oscillation event remotely accelerates ocean upwelling to abruptly terminate the 1997/1998 super El NiÃ±o. Geophysical Research Letters, 2017, 44, 9489-9495.	4.0	19
69	Genesis of Super Cyclone Pam (2015): Modulation of Low-Frequency Large-Scale Circulations and the Maddenâ€“Julian Oscillation by Sea Surface Temperature Anomalies. Monthly Weather Review, 2017, 145, 3143-3159.	1.4	9
70	Outcomes and challenges of global high-resolution non-hydrostatic atmospheric simulations using the K computer. Progress in Earth and Planetary Science, 2017, 4, .	3.0	23
71	Improvement of a Cloud Microphysics Scheme for a Global Nonhydrostatic Model Using TRMM and a Satellite Simulator. Journals of the Atmospheric Sciences, 2017, 74, 167-184.	1.7	37
72	Resolution Dependency of Numerically Simulated Stratosphere-to-Troposphere Transport Associated with Mid-Latitude Closed Cyclones in Early Spring around Japan. Scientific Online Letters on the Atmosphere, 2017, 13, 186-191.	1.4	4

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73	Editorial for the Special Edition on Contributions to Asia Oceania Atmospheric Sciences. Journal of the Meteorological Society of Japan, 2017, 95, 4-5.	1.8	1
74	Feasibility Study for Future Space-Borne Coherent Doppler Wind Lidar, Part 1: Instrumental Overview for Global Wind Profile Observation. Journal of the Meteorological Society of Japan, 2017, 95, 301-317.	1.8	17
75	Feasibility Study for Future Spaceborne Coherent Doppler Wind Lidar, Part 2: Measurement Simulation Algorithms and Retrieval Error Characterization. Journal of the Meteorological Society of Japan, 2017, 95, 319-342.	1.8	9
76	Study on measurement performance of future space-based Doppler wind lidar in Japan. , 2017, , .		2
77	A 4D-Var inversion system based on the icosahedral grid model (NICAM-TM 4D-Var v1.0) â€“ PartÂ2: Optimization scheme and identical twin experiment of atmospheric CO₂ inversion. Geoscientific Model Development, 2017, 10, 2201-2219.	3.6	27
78	A 4D-Var inversion system based on the icosahedral grid model (NICAM-TM 4D-Var v1.0) â€“ Part 1: Offline forward and adjoint transport models. Geoscientific Model Development, 2017, 10, 1157-1174.	3.6	27
79	High Resolution Model Intercomparison Project (HighResMIPÂv1.0) for CMIP6. Geoscientific Model Development, 2016, 9, 4185-4208.	3.6	643
80	A Synoptic-Scale Cold-Reservoir Hypothesis on the Origin of the Mature-Stage Super Cloud Cluster: A Case Study with a Global Nonhydrostatic Model. Meteorological Monographs, 2016, 56, 14.1-14.24.	5.0	2
81	High Cloud Responses to Global Warming Simulated by Two Different Cloud Microphysics Schemes Implemented in the Nonhydrostatic Icosahedral Atmospheric Model (NICAM). Journal of Climate, 2016, 29, 5949-5964.	3.2	21
82	Evaluating Arctic cloud radiative effects simulated by NICAM with Aâ€train. Journal of Geophysical Research D: Atmospheres, 2016, 121, 7041-7063.	3.3	26
83	Error and Energy Budget Analysis of a Nonhydrostatic Stretched-Grid Global Atmospheric Model. Monthly Weather Review, 2016, 144, 1423-1447.	1.4	17
84	Influence of topography on temperature variations in the tropical tropopause layer. Journal of Geophysical Research D: Atmospheres, 2016, 121, 11,556.	3.3	5
85	Warm Cores, Eyewall Slopes, and Intensities of Tropical Cyclones Simulated by a 7-km-Mesh Global Nonhydrostatic Model. Journals of the Atmospheric Sciences, 2016, 73, 4289-4309.	1.7	18
86	A Conserved Topographical Representation Scheme Using a Thin-Wall Approximation in Z-Coordinates. Scientific Online Letters on the Atmosphere, 2016, 12, 232-236.	1.4	3
87	Measurement Performance Assessment of Future Space-Borne Doppler Wind Lidar for Numerical Weather Prediction. Scientific Online Letters on the Atmosphere, 2016, 12, 55-59.	1.4	8
88	Role of the Vertical Structure of a Simulated Tropical Cyclone in Its Motion: A Case Study of Typhoon Fengshen (2008). Scientific Online Letters on the Atmosphere, 2016, 12, 203-208.	1.4	18
89	Structure of Tropical Convective Systems in Aqua-Planet Experiments: Radiative-Convective Equilibrium Versus the Earth-Like Experiment. Scientific Online Letters on the Atmosphere, 2016, 12, 220-224.	1.4	8
90	A review by the chief editors of some of the most popular papers published by PEPS in 2014â€“2015. Progress in Earth and Planetary Science, 2016, 3, .	3.0	0

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91	High cloud size dependency in the applicability of the fixed anvil temperature hypothesis using global nonhydrostatic simulations. Geophysical Research Letters, 2016, 43, 2307-2314.	4.0	12
92	Tropical synoptic-scale wave disturbances over the western Pacific simulated by a global cloud-system resolving model. Theoretical and Applied Climatology, 2016, 124, 737-755.	2.8	17
93	On the Landâ€“Ocean Contrast of Tropical Convection and Microphysics Statistics Derived from TRMM Satellite Signals and Global Storm-Resolving Models. Journal of Hydrometeorology, 2016, 17, 1425-1445.	1.9	54
94	ppOpen-HPC: Open Source Infrastructure for Development and Execution of Large-Scale Scientific Applications on Post-Peta-Scale Supercomputers with Automatic Tuning (AT). Mathematics for Industry, 2016, , 15-35.	0.4	9
95	Vertical grid spacing necessary for simulating tropical cirrus clouds with a highâ€resolution atmospheric general circulation model. Geophysical Research Letters, 2015, 42, 4150-4157.	4.0	27
96	Cold and Warm Rain Simulated Using a Global Nonhydrostatic Model without Cumulus Parameterization, and their Responses to Global Warming. Journal of the Meteorological Society of Japan, 2015, 93, 181-197.	1.8	12
97	A 20-Year Climatology of a NICAM AMIP-Type Simulation. Journal of the Meteorological Society of Japan, 2015, 93, 393-424.	1.8	104
98	Constraint on Future Change in Global Frequency of Tropical Cyclones due to Global Warming. Journal of the Meteorological Society of Japan, 2015, 93, 489-500.	1.8	37
99	Impact of Tropical Disturbance on the Indian Summer Monsoon Onset Simulated by a Global Cloud-System-Resolving Model. Scientific Online Letters on the Atmosphere, 2015, 11, 80-84.	1.4	5
100	Topographical Effects on Internally Produced MJO-Like Disturbances in an Aqua-Planet Version of NICAM. Scientific Online Letters on the Atmosphere, 2015, 11, 170-176.	1.4	18
101	Application of a global nonhydrostatic model with a stretched-grid system to regional aerosol simulations around Japan. Geoscientific Model Development, 2015, 8, 235-259.	3.6	33
102	Intraseasonal variability and tropical cyclogenesis in the western North Pacific simulated by a global nonhydrostatic atmospheric model. Geophysical Research Letters, 2015, 42, 565-571.	4.0	53
103	Numerical Experiments to Analyze Cloud Microphysical Processes Depicted in Vertical Profiles of Radar Reflectivity of Warm Clouds. Journals of the Atmospheric Sciences, 2015, 72, 4509-4528.	1.7	3
104	Improvement in Global Cloud-System-Resolving Simulations by Using a Double-Moment Bulk Cloud Microphysics Scheme. Journal of Climate, 2015, 28, 2405-2419.	3.2	37
105	The EarthCARE Satellite: The Next Step Forward in Global Measurements of Clouds, Aerosols, Precipitation, and Radiation. Bulletin of the American Meteorological Society, 2015, 96, 1311-1332.	3.3	443
106	On the Warm Core of a Tropical Cyclone Formed near the Tropopause. Journals of the Atmospheric Sciences, 2015, 72, 551-571.	1.7	51
107	Impact of the sea surface temperature rise on stormâ€track clouds in global nonhydrostatic aqua planet simulations. Geophysical Research Letters, 2014, 41, 3545-3552.	4.0	13
108	Evaluation of the Tourism Climate Index over Japan in a Future Climate Using a Statistical Downscaling Method. Journal of the Meteorological Society of Japan, 2014, 92, 37-54.	1.8	18

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109	A hypothesis and a case-study projection of an influence of MJO modulation on boreal-summer tropical cyclogenesis in a warmer climate with a global non-hydrostatic model: a transition toward the central Pacific?. Frontiers in Earth Science, 2014, 2, .	1.8	3
110	Evaluation of Precipitating Hydrometeor Parameterizations in a Single-Moment Bulk Microphysics Scheme for Deep Convective Systems over the Tropical Central Pacific. Journals of the Atmospheric Sciences, 2014, 71, 2654-2673.	1.7	57
111	Gradient Wind Balance in Tropical Cyclones in High-Resolution Global Experiments. Monthly Weather Review, 2014, 142, 1908-1926.	1.4	20
112	Responses of Tropical and Subtropical High-Cloud Statistics to Global Warming. Journal of Climate, 2014, 27, 7753-7768.	3.2	19
113	The Non-hydrostatic Icosahedral Atmospheric Model: description and development. Progress in Earth and Planetary Science, 2014, 1, .	3.0	274
114	High cloud increase in a perturbed SST experiment with a global nonhydrostatic model including explicit convective processes. Journal of Advances in Modeling Earth Systems, 2014, 6, 571-585.	3.8	35
115	Rapid development of arctic cyclone in June 2008 simulated by the cloud resolving global model NICAM. Meteorology and Atmospheric Physics, 2014, 126, 105-117.	2.0	14
116	Maddenâ€“Julian Oscillation prediction skill of a new-generation global model demonstrated using a supercomputer. Nature Communications, 2014, 5, 3769.	12.8	97
117	Scalable rank-mapping algorithm for an icosahedral grid system on the massive parallel computer with a 3-D torus network. Parallel Computing, 2014, 40, 362-373.	2.1	6
118	Simultaneous evaluation of ice cloud microphysics and nonsphericity of the cloud optical properties using hydrometeor video sonde and radiometer sonde in situ observations. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6681-6701.	3.3	21
119	Relationships between layer-mean radar reflectivity and columnar effective radius of warm cloud: Numerical study using a cloud microphysical bin model. Journal of Geophysical Research D: Atmospheres, 2014, 119, 3281-3294.	3.3	3
120	Intermodel variances of subtropical stratocumulus environments simulated in CMIP5 models. Geophysical Research Letters, 2014, 41, 7754-7761.	4.0	18
121	Icosahedral grids. , 2014, , 636-660.		1
122	Standard experiments of atmospheric general circulation models. , 2014, , 689-702.		2
123	Excitation of Deep Convection to the North of Tropical Storm Bebinca (2006). Journal of the Meteorological Society of Japan, 2014, 92, 141-161.	1.8	4
124	Responses of Subtropical Marine Stratocumulus Cloud to Perturbed Lower Atmospheres. Scientific Online Letters on the Atmosphere, 2014, 10, 34-38.	1.4	8
125	Global nonhydrostatic models. , 2014, , 661-688.		0
126	Nonhydrostatic modeling. , 2014, , 608-635.		0

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127	Moist convection. , 2014, , 395-419.		0
128	Low-latitude circulations. , 2014, , 420-440.		0
129	Response of Ice and Liquid Water Paths of Tropical Cyclones to Global Warming Simulated by a Global Nonhydrostatic Model with Explicit Cloud Microphysics. Journal of Climate, 2013, 26, 9931-9945.	3.2	21
130	Vertical structure of ice cloud layers from CloudSat and CALIPSO measurements and comparison to NICAM simulations. Journal of Geophysical Research D: Atmospheres, 2013, 118, 9930-9947.	3.3	14
131	Revolutionizing Climate Modeling with Project Athena: A Multi-Institutional, International Collaboration. Bulletin of the American Meteorological Society, 2013, 94, 231-245.	3.3	75
132	Evaluating cloud microphysics from NICAM against CloudSat and CALIPSO. Journal of Geophysical Research D: Atmospheres, 2013, 118, 7273-7292.	3.3	79
133	Possible Impact of a Tropical Cyclone on the Northward Migration of the Baiu Frontal Zone. Scientific Online Letters on the Atmosphere, 2013, 9, 89-93.	1.4	5
134	The Aqua-Planet Experiment (APE): Response to Changed Meridional SST Profile. Journal of the Meteorological Society of Japan, 2013, 91A, 57-89.	1.8	34
135	Numerical Examination of the Diurnal Variation of Summer Precipitation over Southern China. Scientific Online Letters on the Atmosphere, 2013, 9, 129-133.	1.4	14
136	A Numerical Study of a Stratocumulus-Topped Boundary-Layer: Relations of Decaying Clouds with a Stability Parameter across Inversion. Journal of the Meteorological Society of Japan, 2013, 91, 727-746.	1.8	8
137	The Aqua-Planet Experiment (APE): CONTROL SST Simulation. Journal of the Meteorological Society of Japan, 2013, 91A, 17-56.	1.8	64
138	Environmental Conditions for Tropical Cyclogenesis Associated with African Easterly Waves. Scientific Online Letters on the Atmosphere, 2013, 9, 120-124.	1.4	7
139	Convective Momentum Transport by Rainbands within a Maddenâ€“Julian Oscillation in a Global Nonhydrostatic Model with Explicit Deep Convective Processes. Part I: Methodology and General Results. Journals of the Atmospheric Sciences, 2012, 69, 1317-1338.	1.7	42
140	Response of Upper Clouds in Global Warming Experiments Obtained Using a Global Nonhydrostatic Model with Explicit Cloud Processes. Journal of Climate, 2012, 25, 2178-2191.	3.2	40
141	Quantitative Assessment of Diurnal Variation of Tropical Convection Simulated by a Global Nonhydrostatic Model without Cumulus Parameterization. Journal of Climate, 2012, 25, 5119-5134.	3.2	33
142	Seasonal and Intraseasonal Modulation of Tropical Cyclogenesis Environment over the Bay of Bengal during the Extended Summer Monsoon. Journal of Climate, 2012, 25, 2914-2930.	3.2	67
143	Semi-diurnal variation of surface rainfall studied from global cloud-system resolving model and satellite observations. , 2012, , .		1
144	A multi-instrument comparison of integrated water vapour measurements at a high latitude site. Atmospheric Chemistry and Physics, 2012, 12, 10925-10943.	4.9	55

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145	The Intra-Seasonal Oscillation and its control of tropical cyclones simulated by high-resolution global atmospheric models. Climate Dynamics, 2012, 39, 2185-2206.	3.8	50
146	Development of cloud liquid water database using global cloud-system resolving model for GPM/DPR algorithm. , 2012, , .		4
147	An assessment of the cloud signals simulated by NICAM using ISCCP, CALIPSO, and CloudSat satellite simulators. Journal of Geophysical Research, 2012, 117, .	3.3	49
148	Imposing strong constraints on tropical terrestrial CO2fluxes using passenger aircraft based measurements. Journal of Geophysical Research, 2012, 117, n/a-n/a.	3.3	75
149	Analysis of the tropical tropopause layer using the Nonhydrostatic Icosahedral Atmospheric Model (NICAM): 2. An experiment under the atmospheric conditions of December 2006 to January 2007. Journal of Geophysical Research, 2012, 117, .	3.3	6
150	Eastward-Propagating Property of Large-Scale Precipitation Systems Simulated in the Coarse-Resolution NICAM and an Explanation of its Appearance. Scientific Online Letters on the Atmosphere, 2012, 8, 21-24.	1.4	13
151	Simulating the diurnal cycle of rainfall in global climate models: resolution versus parameterization. Climate Dynamics, 2012, 39, 399-418.	3.8	190
152	Why do Super Clusters and Madden Julian Oscillation Exist over the Equatorial Region?. Scientific Online Letters on the Atmosphere, 2012, 8, 33-36.	1.4	6
153	JMSJ Award in 2011. Journal of the Meteorological Society of Japan, 2012, 90, ii-ii.	1.8	0
154	Three-dimensional variations of atmospheric CO₂: aircraft measurements and multi-transport model simulations. Atmospheric Chemistry and Physics, 2011, 11, 13359-13375.	4.9	41
155	First International Workshop on Advances in High-Performance Computational Earth Sciences: Applications and Frameworks (IHPCES). Procedia Computer Science, 2011, 4, 1448-1449.	2.0	0
156	Sensitivity of Hadley Circulation to Physical Parameters and Resolution through Changing Upper-Tropospheric Ice Clouds Using a Global Cloud-System Resolving Model. Journal of Climate, 2011, 24, 2666-2679.	3.2	17
157	Universal Frequency Spectra of Surface Meteorological Fluctuations. Journal of Climate, 2011, 24, 4718-4732.	3.2	6
158	A Three-Dimensional Icosahedral Grid Advection Scheme Preserving Monotonicity and Consistency with Continuity for Atmospheric Tracer Transport. Journal of the Meteorological Society of Japan, 2011, 89, 255-268.	1.8	53
159	Properties of Precipitation and In-Cloud Vertical Motion in a Global Nonhydrostatic Aquaplanet Experiment. Journal of the Meteorological Society of Japan, 2011, 89, 413-439.	1.8	13
160	Statistical Relation between Maximum Vertical Velocity and Surface Precipitation of Tropical Convective Clouds in a Global Nonhydrostatic Aquaplanet Experiment. Journal of the Meteorological Society of Japan, 2011, 89, 553-561.	1.8	4
161	Diurnal Convection Peaks over the Eastern Indian Ocean off Sumatra during Different MJO Phases. Journal of the Meteorological Society of Japan, 2011, 89A, 317-330.	1.8	58
162	CLOUD-CLUSTER-RESOLVING GLOBAL ATMOSPHERE MODELING â€“ A CHALLENGE FOR THE NEW AGE OF TROPICAL METEOROLOGY. World Scientific Series on Asia-Pacific Weather and Climate, 2011, , 455-473.	0.2	1

#	Article	IF	Citations
163	Climate Study Using a Global Cloud-resolving Model. Journal of Geography (Chigaku Zasshi), 2010, 119, 427-440.	0.3	0
164	Impact of different definitions of clear-sky flux on the determination of longwave cloud radiative forcing: NICAM simulation results. Atmospheric Chemistry and Physics, 2010, 10, 11641-11646.	4.9	34
165	The Genesis of Tropical Cyclone Nargis (2008): Environmental Modulation and Numerical Predictability. Journal of the Meteorological Society of Japan, 2010, 88, 497-519.	1.8	25
166	Multiscale Interactions in the Life Cycle of a Tropical Cyclone Simulated in a Global Cloud-System-Resolving Model. Part I: Large-Scale and Storm-Scale Evolutions*. Monthly Weather Review, 2010, 138, 4285-4304.	1.4	20
167	Multiscale Interactions in the Life Cycle of a Tropical Cyclone Simulated in a Global Cloud-System-Resolving Model. Part II: System-Scale and Mesoscale Processes*. Monthly Weather Review, 2010, 138, 4305-4327.	1.4	21
168	Comparison of Explicitly Simulated and Downscaled Tropical Cyclone Activity in a Highâ€Resolution Global Climate Model. Journal of Advances in Modeling Earth Systems, 2010, 2, .	3.8	25
169	Evaluations of cloud properties of global and local cloud system resolving models using CALIPSO and CloudSat simulators. Journal of Geophysical Research, 2010, 115, .	3.3	60
170	Comparison of highâ€level clouds represented in a global cloud systemâ€“resolving model with CALIPSO/CloudSat and geostationary satellite observations. Journal of Geophysical Research, 2010, 115, .	3.3	33
171	Relative humidity changes in a warmer climate. Journal of Geophysical Research, 2010, 115, .	3.3	185
172	Analysis of the tropical tropopause layer using the Nonhydrostatic Icosahedral Atmospheric Model (NICAM): Aqua planet experiments. Journal of Geophysical Research, 2010, 115, .	3.3	7
173	Continual influences of tropical waves on the genesis and rapid intensification of Typhoon Durian (2006). Geophysical Research Letters, 2010, 37, .	4.0	8
174	Projection of changes in tropical cyclone activity and cloud height due to greenhouse warming: Global cloudâ€systemâ€resolving approach. Geophysical Research Letters, 2010, 37, .	4.0	63
175	Importance of the subgrid-scale turbulent moist process: Cloud distribution in global cloud-resolving simulations. Atmospheric Research, 2010, 96, 208-217.	4.1	100
176	Ensemble Simulation of Cyclone Nargis by a Global Cloud-System-Resolving Model-Modulation of Cyclogenesis by the Madden-Julian Oscillation. Journal of the Meteorological Society of Japan, 2010, 88, 571-591.	1.8	23
177	Numerical Simulation of the Genesis of Cyclone Nargis Using a Global Cloud-System Resolving Model, NICAM. , 2010, , 65-72.		1
178	Change of Tropical Cyclone and Seasonal Climate State in a Global Warming Experiment with a Global Cloud-System-Resolving Model. , 2010, , 25-37.		0
179	Characteristics of the Kinetic Energy Spectrum of NICAM Model Atmosphere. Scientific Online Letters on the Atmosphere, 2009, 5, 180-183.	1.4	24
180	Statistics on High-Cloud Areas and Their Sensitivities to Cloud Microphysics Using Single-Cloud Experiments. Journals of the Atmospheric Sciences, 2009, 66, 2659-2677.	1.7	28

#	Article	IF	Citations
181	An MJO Simulated by the NICAM at 14- and 7-km Resolutions. Monthly Weather Review, 2009, 137, 3254-3268.	1.4	53
182	Diurnal Cycle of Precipitation in the Tropics Simulated in a Global Cloud-Resolving Model. Journal of Climate, 2009, 22, 4809-4826.	3.2	214
183	A PDF-based hybrid prognostic cloud scheme for general circulation models. Climate Dynamics, 2009, 33, 795-816.	3.8	59
184	Asian summer monsoon simulated by a global cloudâ€systemâ€resolving model: Diurnal to intraâ€seasonal variability. Geophysical Research Letters, 2009, 36, .	4.0	42
185	Spontaneous onset of a Maddenâ€Julian oscillation event in a cloudâ€systemâ€resolving simulation. Geophysical Research Letters, 2009, 36, .	4.0	23
186	Multi-scale Organization of Convection in a Global Numerical Simulation of the December 2006 MJO Event Using Explicit Moist Processes. Journal of the Meteorological Society of Japan, 2009, 87, 335-345.	1.8	33
187	A Simulated Preconditioning of Typhoon Genesis Controlled by a Boreal Summer Madden-Julian Oscillation Event in a Global Cloud-system-resolving Model. Scientific Online Letters on the Atmosphere, 2009, 5, 65-68.	1.4	38
188	Simulating Global Clouds. , 2009, , 469-486.		8
189	Current Understanding and Quantification of Clouds in the Changing Climate System and Strategies for Reducing Critical Uncertainties. , 2009, , 557-574.		22
190	Nonhydrostatic icosahedral atmospheric model (NICAM) for global cloud resolving simulations. Journal of Computational Physics, 2008, 227, 3486-3514.	3.8	548
191	TransCom model simulations of hourly atmospheric CO₂: Experimental overview and diurnal cycle results for 2002. Global Biogeochemical Cycles, 2008, 22, .	4.9	142
192	TransCom model simulations of hourly atmospheric CO₂: Analysis of synopticâ€scale variations for the period 2002â€“2003. Global Biogeochemical Cycles, 2008, 22, .	4.9	119
193	Global cloudâ€systemâ€resolving simulation of aerosol effect on warm clouds. Geophysical Research Letters, 2008, 35, .	4.0	58
194	Global cloudâ€systemâ€resolving model NICAM successfully simulated the lifecycles of two real tropical cyclones. Geophysical Research Letters, 2008, 35, .	4.0	61
195	A joint satellite and global cloudâ€resolving model analysis of a Maddenâ€Julian Oscillation event: Model diagnosis. Journal of Geophysical Research, 2008, 113, .	3.3	73
196	A New Approach to Atmospheric General Circulation Model: Global Cloud Resolving Model NICAM and its Computational Performance. SIAM Journal of Scientific Computing, 2008, 30, 2755-2776.	2.8	22
197	Convectively Coupled Equatorial Waves Simulated on an Aquaplanet in a Global Nonhydrostatic Experiment. Journals of the Atmospheric Sciences, 2008, 65, 1246-1265.	1.7	29
198	Coarse-Resolution Models Only Partly Cloudy. Science, 2008, 320, 612-613.	12.6	9

#	Article	IF	Citations
199	Characteristics of Cloud Size of Deep Convection Simulated by a Global Cloud Resolving Model over the Western Tropical Pacific. Journal of the Meteorological Society of Japan, 2008, 86A, 1-15.	1.8	59
200	Predictability Aspects of Global Aqua-planet Simulations with Explicit Convection. Journal of the Meteorological Society of Japan, 2008, 86A, 175-185.	1.8	40
201	Precipitation Statistics Comparison Between Global Cloud Resolving Simulation with NICAM and TRMM PR Data. , 2008, , 99-112.		14
202	Numerical Simulations of Heavy Rainfalls by a Global Cloud-Resolving Model. Journal of Disaster Research, 2008, 3, 33-38.	0.7	3
203	Resolution Dependency of the Diurnal Cycle of Convective Clouds over the Tibetan Plateau in a Mesoscale Model. Journal of the Meteorological Society of Japan, 2008, 86A, 17-31.	1.8	57
204	Multiscale Organization of Convection Simulated with Explicit Cloud Processes on an Aquaplanet. Journals of the Atmospheric Sciences, 2007, 64, 1902-1921.	1.7	58
205	A Madden-Julian Oscillation Event Realistically Simulated by a Global Cloud-Resolving Model. Science, 2007, 318, 1763-1765.	12.6	315
206	Mountain-Wave-Like Spurious Waves Associated with Simulated Cold Fronts due to Inconsistencies between Horizontal and Vertical Resolutions. Monthly Weather Review, 2007, 135, 2629-2641.	1.4	15
207	A short-duration global cloud-resolving simulation with a realistic land and sea distribution. Geophysical Research Letters, 2007, 34, .	4.0	49
208	Spring diurnal cycle of clouds over Tibetan Plateau: Global cloudâ€resolving simulations and satellite observations. Geophysical Research Letters, 2007, 34, .	4.0	20
209	Climatology of a nonhydrostatic global model with explicit cloud processes. Geophysical Research Letters, 2007, 34, .	4.0	29
210	A global cloud-resolving simulation: Preliminary results from an aqua planet experiment. Geophysical Research Letters, 2005, 32, .	4.0	193
211	A climate sensitivity test using a global cloud resolving model under an aqua planet condition. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	65
212	A new dynamical framework of nonhydrostatic global model using the icosahedral grid. Fluid Dynamics Research, 2004, 34, 357-400.	1.3	351
213	An Accurate Semi-Lagrangian Scheme with a Unified Interpolation Function Constructed from Vorticity and Velocity Components. JSME International Journal Series B, 2004, 47, 716-724.	0.3	1
214	A Comparison Study of Computational Performace between a Spectral Transform Model and a Gridpoint Model. , 2004, , 333-340.		0
215	Computational Performance of the Dynamical Part of a Next Generation Climate Model using an Icosahedral Grid on the Earth Simulator. , 2003, , 63-69.		2
216	An Accurate Semi-Lagrangian Scheme for Raindrop Sedimentation. Monthly Weather Review, 2003, 131, 974-983.	1.4	9

#	Article	IF	Citations
217	Conservative Scheme for a Compressible Nonhydrostatic Model with Moist Processes. Monthly Weather Review, 2003, 131, 1033-1050.	1.4	38
218	Development of a Nonhydrostatic General Circulation Model using an Icosahedral Grid. , 2003, , 115-122.		3
219	Conservative Scheme for the Compressible Nonhydrostatic Models with the Horizontally Explicit and Vertically Implicit Time Integration Scheme. Monthly Weather Review, 2002, 130, 1227-1245.	1.4	67
220	An Optimization of the Icosahedral Grid Modified by Spring Dynamics. Journal of Computational Physics, 2002, 183, 307-331.	3.8	81
221	The latitudinal gradient of potential vorticity in the mid-latitudes of the troposphere. Geophysical Research Letters, 2001, 28, 163-166.	4.0	0
222	Shallow Water Model on a Modified Icosahedral Geodesic Grid by Using Spring Dynamics. Journal of Computational Physics, 2001, 174, 579-613.	3.8	171
223	Relation between the meridional distribution of potential vorticity and the Lagrangian mean circulation in the troposphere. Tellus, Series A: Dynamic Meteorology and Oceanography, 1999, 51, 833-853.	1.7	1
224	Response of the atmospheric angular momentum and the length of the day to the surface temperature increase for an Aqua Planet Model. Geophysical Research Letters, 1996, 23, 2569-2572.	4.0	5
225	A Stretched Icosahedral Grid for the Global Cloud Resolving Model. , 1996, , 177-182.		0
226	A Stretched Icosahedral Grid for the Global Cloud Resolving Model. , 1996, , 177-182.		0
227	Hadley Circulations and Large-Scale Motions of Moist Convection in the Two-Dimensional Numerical Model. Journal of the Meteorological Society of Japan, 1995, 73, 1059-1078.	1.8	2
228	Hadley circulations and their roles in the global angular momentum budget in two- and three-dimensional models. Tellus, Series A: Dynamic Meteorology and Oceanography, 1995, 47, 548-560.	1.7	4
229	Hadley Circulations in Radiativeâ€“Convective Equilibrium in an Axially Symmetric Atmosphere. Journals of the Atmospheric Sciences, 1994, 51, 1947-1968.	1.7	64
230	Simple Cumulus Models in One-Dimensional Radiative Convective Equilibrium Problems. Journals of the Atmospheric Sciences, 1992, 49, 1202-1220.	1.7	25
231	Current Challenges in Climate and Weather Research and Future Directions. Atmosphere - Ocean, 0, , 1-12.	1.6	1