Hiroyuki Murakami

List of Publications by Year
in descending order

114 papers	6,509 citations	50244 46 h-index	69214 77 g-index
115 all docs	115 docs citations	115 times ranked	4431 citing authors

#	Article	IF	Citations
1	Atlantic hurricanes and associated insurance loss potentials in future climate scenarios: limitations of high-resolution AGCM simulations. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 64, 15672.	0.8	11
2	Mechanisms of Regional Arctic Sea Ice Predictability in Two Dynamical Seasonal Forecast Systems. Journal of Climate, 2022, 35, 4207-4231.	1.2	6
3	Impacts of Midlatitude Western North Pacific Sea Surface Temperature Anomaly on the Subseasonal to Seasonal Tropical Cyclone Activity: Case Study of the 2018 Boreal Summer. Scientific Online Letters on the Atmosphere, 2022, 18, 88-95.	0.6	3
4	Subseasonal to Seasonal Tropical Cyclone Prediction. , 2022, , 201-235.		0
5	Extreme Typhoon Rainfall Under Changing Climate. , 2022, , 236-257.		0
6	Future Tropical Cyclone Projections and Uncertainty Estimates. , 2022, , 258-292.		0
7	Climate Variability. Part II: Interannual to Interdecadal Variability. , 2022, , 42-98.		0
8	Climate Variability and Tropical Cyclones. , 2022, , 99-200.		0
9	Roles of Meridional Overturning in Subpolar Southern Ocean SST Trends: Insights from Ensemble Simulations. Journal of Climate, 2022, 35, 1577-1596.	1.2	3
10	Skillful Seasonal Prediction of North American Summertime Heat Extremes. Journal of Climate, 2022, 35, 4331-4345.	1.2	6
11	Increasing Frequency of Anomalous Precipitation Events in Japan Detected by a Deep Learning Autoencoder. Earth's Future, 2022, 10, .	2.4	2
12	Patterns and frequency of projected future tropical cyclone genesis are governed by dynamic effects. Communications Earth & Environment, 2022, 3, .	2.6	19
13	When Will Humanity Notice Its Influence on Atmospheric Rivers?. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	5
14	Substantial global influence of anthropogenic aerosols on tropical cyclones over the past 40 years. Science Advances, 2022, 8, eabn9493.	4.7	24
15	Declining tropical cyclone frequency under global warming. Nature Climate Change, 2022, 12, 655-661.	8.1	64
16	Tropical Cyclone Characteristics in the MERRAâ€2 Reanalysis and AMIP Simulations. Earth and Space Science, 2021, 8, e2020EA001415.	1.1	5
17	Dynamical Seasonal Predictions of Tropical Cyclone Activity: Roles of Sea Surface Temperature Errors and Atmosphereâ€"Land Initialization. Journal of Climate, 2021, 34, 1743-1766.	1.2	3
18	Seasonal Prediction and Predictability of Regional Antarctic Sea Ice. Journal of Climate, 2021, 34, 6207-6233.	1.2	20

#	Article	IF	Citations
19	East Antarctic cooling induced by decadal changes in Madden-Julian oscillation during austral summer. Science Advances, 2021, 7, .	4.7	9
20	Are Multiseasonal Forecasts of Atmospheric Rivers Possible?. Geophysical Research Letters, 2021, 48, e2021GL094000.	1.5	8
21	Seasonal predictability of baroclinic wave activity. Npj Climate and Atmospheric Science, 2021, 4, .	2.6	8
22	Changing Impacts of Tropical Cyclones on East and Southeast Asian Inland Regions in the Past and a Globally Warmed Future Climate. Frontiers in Earth Science, 2021, 9, .	0.8	16
23	Azimuthally Averaged Wind and Thermodynamic Structures of Tropical Cyclones in Global Climate Models and Their Sensitivity to Horizontal Resolution. Journal of Climate, 2020, 33, 1575-1595.	1.2	20
24	A Hybrid Dynamicalâ€Statistical Model for Advancing Subseasonal Tropical Cyclone Prediction Over the Western North Pacific. Geophysical Research Letters, 2020, 47, e2020GL090095.	1.5	8
25	Detected climatic change in global distribution of tropical cyclones. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10706-10714.	3.3	123
26	Tropical cyclone motion in a changing climate. Science Advances, 2020, 6, eaaz7610.	4.7	68
27	Characteristics of Model Tropical Cyclone Climatology and the Large-Scale Environment. Journal of Climate, 2020, 33, 4463-4487.	1.2	42
28	Effects of Anthropogenic Forcing and Natural Variability on the 2018 Heatwave in Northeast Asia. Bulletin of the American Meteorological Society, 2020, 101, S77-S82.	1.7	12
29	Application of the Cyclone Phase Space to Extratropical Transition in a Global Climate Model. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001878.	1.3	13
30	SPEAR: The Next Generation GFDL Modeling System for Seasonal to Multidecadal Prediction and Projection. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001895.	1.3	94
31	Dynamic genesis potential index for diagnosing present-day and future global tropical cyclone genesis. Environmental Research Letters, 2020, 15, 114008.	2.2	55
32	Role of Abnormally Enhanced MJO over the Western Pacific in the Formation and Subseasonal Predictability of the Record-Breaking Northeast Asian Heatwave in the Summer of 2018. Journal of Climate, 2020, 33, 3333-3349.	1.2	38
33	An asymmetric rainfall response to ENSO in East Asia. Climate Dynamics, 2019, 52, 2303-2318.	1.7	22
34	Tropical cyclone sensitivities to CO2 doubling: roles of atmospheric resolution, synoptic variability and background climate changes. Climate Dynamics, 2019, 53, 5999-6033.	1.7	114
35	Moist Static Energy Budget Analysis of Tropical Cyclone Intensification in High-Resolution Climate Models. Journal of Climate, 2019, 32, 6071-6095.	1.2	30
36	On the Mechanisms of the Active 2018 Tropical Cyclone Season in the North Pacific. Geophysical Research Letters, 2019, 46, 12293-12302.	1.5	15

#	Article	IF	Citations
37	Potential Increase in Hazard From Mediterranean Hurricane Activity With Global Warming. Geophysical Research Letters, 2019, 46, 1754-1764.	1.5	62
38	Impact of Anthropogenic Climate Change on United States Major Hurricane Landfall Frequency. Journal of Marine Science and Engineering, 2019, 7, 135.	1.2	9
39	Rainfall from tropical cyclones: high-resolution simulations and seasonal forecasts. Climate Dynamics, 2019, 52, 5269-5289.	1.7	24
40	Dynamical Seasonal Prediction of Tropical Cyclone Activity: Robust Assessment of Prediction Skill and Predictability. Geophysical Research Letters, 2019, 46, 5506-5515.	1.5	13
41	Simulated ENSO's impact on tropical cyclone genesis over the western North Pacific in CMIP5 models and its changes under global warming. International Journal of Climatology, 2019, 39, 3668-3678.	1.5	21
42	Recent increases in tropical cyclone intensification rates. Nature Communications, 2019, 10, 635.	5.8	167
43	Tropical cyclones and climate change. Tropical Cyclone Research and Review, 2019, 8, 240-250.	1.0	57
44	Seasonal Tropical Cyclone Forecasting. Tropical Cyclone Research and Review, 2019, 8, 134-149.	1.0	40
45	Process-Oriented Diagnosis of Tropical Cyclones in High-Resolution GCMs. Journal of Climate, 2018, 31, 1685-1702.	1.2	28
46	Dominant Role of Atlantic Multidecadal Oscillation in the Recent Decadal Changes in Western North Pacific Tropical Cyclone Activity. Geophysical Research Letters, 2018, 45, 354-362.	1.5	75
47	Impacts of the Pacific Meridional Mode on Landfalling North Atlantic tropical cyclones. Climate Dynamics, 2018, 50, 991-1006.	1.7	8
48	Towards Dynamical Seasonal Forecast of Extratropical Transition in the North Atlantic. Geophysical Research Letters, 2018, 45, 12,602.	1.5	3
49	Dominant effect of relative tropical Atlantic warming on major hurricane occurrence. Science, 2018, 362, 794-799.	6.0	70
50	Projection of Landfallingâ€“Tropical Cyclone Rainfall in the Eastern United States under Anthropogenic Warming. Journal of Climate, 2018, 31, 7269-7286.	1.2	37
51	Projected Response of Tropical Cyclone Intensity and Intensification in a Global Climate Model. Journal of Climate, 2018, 31, 8281-8303.	1.2	163
52	The Present-Day Simulation and Twenty-First-Century Projection of the Climatology of Extratropical Transition in the North Atlantic. Journal of Climate, 2017, 30, 2739-2756.	1.2	45
53	Dominant Role of Subtropical Pacific Warming in Extreme Eastern Pacific Hurricane Seasons: 2015 and the Future. Journal of Climate, 2017, 30, 243-264.	1.2	79
54	Statisticalâ€“Dynamical Seasonal Forecast of Western North Pacific and East Asia Landfalling Tropical Cyclones using the GFDL FLOR Coupled Climate Model. Journal of Climate, 2017, 30, 2209-2232.	1.2	44

#	Article	IF	Citations
55	Weakening of the North American monsoon with global warming. Nature Climate Change, 2017, 7, 806-812.	8.1	105
56	Western North Pacific Tropical Cyclone Model Tracks in Present and Future Climates. Journal of Geophysical Research D: Atmospheres, 2017, 122, 9721-9744.	1.2	54
57	Future Changes in Tropical Cyclone Activity in Highâ€Resolution Largeâ€Ensemble Simulations. Geophysical Research Letters, 2017, 44, 9910-9917.	1.5	159
58	Increasing frequency of extremely severe cyclonic storms over the Arabian Sea. Nature Climate Change, 2017, 7, 885-889.	8.1	132
59	Projection of future changes in the frequency of intense tropical cyclones. Climate Dynamics, 2017, 49, 619-632.	1.7	51
60	Modulation of western North Pacific tropical cyclone activity by the Atlantic Meridional Mode. Climate Dynamics, 2017, 48, 631-647.	1.7	48
61	Statisticalâ€“Dynamical Seasonal Forecast of North Atlantic and U.S. Landfalling Tropical Cyclones Using the High-Resolution GFDL FLOR Coupled Model. Monthly Weather Review, 2016, 144, 2101-2123.	0.5	55
62	Statisticalâ€dynamical seasonal forecast of western North Pacific and East Asia landfalling tropical cyclones using the highâ€resolution GFDL FLOR coupled model. Journal of Advances in Modeling Earth Systems, 2016, 8, 538-565.	1.3	20
63	The influence of model resolution on the simulated sensitivity of North Atlantic tropical cyclone maximum intensity to sea surface temperature. Journal of Advances in Modeling Earth Systems, 2016, 8, 1037-1054.	1.3	13
64	Seasonal Forecasts of Major Hurricanes and Landfalling Tropical Cyclones using a High-Resolution GFDL Coupled Climate Model. Journal of Climate, 2016, 29, 7977-7989.	1.2	64
65	The Resolution Dependence of Contiguous U.S. Precipitation Extremes in Response to CO2 Forcing. Journal of Climate, 2016, 29, 7991-8012.	1.2	74
66	Simulated Connections between ENSO and Tropical Cyclones near Guam in a High-Resolution GFDL Coupled Climate Model: Implications for Seasonal Forecasting. Journal of Climate, 2016, 29, 8231-8248.	1.2	3
67	Atmosphere-Ocean Coupling Effect on Intense Tropical Cyclone Distribution and its Future Change with 60â€‰km-AOGCM. Scientific Reports, 2016, 6, 29800.	1.6	25
68	Influences of Natural Variability and Anthropogenic Forcing on the Extreme 2015 Accumulated Cyclone Energy in the Western North Pacific. Bulletin of the American Meteorological Society, 2016, 97, S131-S135.	1.7	29
69	Aerosol data assimilation using data from Himawariâ€8, a nextâ€generation geostationary meteorological satellite. Geophysical Research Letters, 2016, 43, 5886-5894.	1.5	106
70	Impact of Strong ENSO on Regional Tropical Cyclone Activity in a High-Resolution Climate Model in the North Pacific and North Atlantic Oceans. Journal of Climate, 2016, 29, 2375-2394.	1.2	40
71	Improved Simulation of Tropical Cyclone Responses to ENSO in the Western North Pacific in the High-Resolution GFDL HiFLOR Coupled Climate Model*. Journal of Climate, 2016, 29, 1391-1415.	1.2	69
72	The Pacific Meridional Mode and the Occurrence of Tropical Cyclones in the Western North Pacific. Journal of Climate, 2016, 29, 381-398.	1.2	122

#	Article	IF	Citations
73	More tropical cyclones in a cooler climate?. Geophysical Research Letters, 2015, 42, 6780-6784.	1.5	27
74	Effect of airâ€sea coupling on the frequency distribution of intense tropical cyclones over the northwestern Pacific. Geophysical Research Letters, 2015, 42, 10,415.	1.5	31
75	Simulation and Prediction of Category 4 and 5 Hurricanes in the High-Resolution GFDL HiFLOR Coupled Climate Model*. Journal of Climate, 2015, 28, 9058-9079.	1.2	181
76	Investigating the Influence of Anthropogenic Forcing and Natural Variability on the 2014 Hawaiian Hurricane Season. Bulletin of the American Meteorological Society, 2015, 96, S115-S119.	1.7	39
77	Hurricanes and Climate: The U.S. CLIVAR Working Group on Hurricanes. Bulletin of the American Meteorological Society, 2015, 96, 997-1017.	1.7	158
78	Hurricanes and Climate: The U.S. CLIVAR Working Group on Hurricanes. Bulletin of the American Meteorological Society, 2015, 96, 1440.	1.7	2
79	A Spectral Cumulus Parameterization Scheme Interpolating between Two Convective Updrafts with Semi-Lagrangian Calculation of Transport by Compensatory Subsidence. Monthly Weather Review, 2015, 143, 597-621.	0.5	82
80	Strengthening of the Walker circulation under globalwarming in an aqua-planet general circulation model simulation. Advances in Atmospheric Sciences, 2015, 32, 1473-1480.	1.9	15
81	Hydroclimate changes over Central America and the Caribbean in a global warming climate projected with 20-km and 60-km mesh MRI atmospheric general circulation models. Papers in Meteorology and Geophysics, 2014, 65, 15-33.	0.9	17
82	Contributing Factors to the Recent High Level of Accumulated Cyclone Energy (ACE) and Power Dissipation Index (PDI) in the North Atlantic*. Journal of Climate, 2014, 27, 3023-3034.	1.2	22
83	Influence of Model Biases on Projected Future Changes in Tropical Cyclone Frequency of Occurrence*. Journal of Climate, 2014, 27, 2159-2181.	1.2	57
84	Tracking Scheme Dependence of Simulated Tropical Cyclone Response to Idealized Climate Simulations. Journal of Climate, 2014, 27, 9197-9213.	1.2	86
85	An Abrupt Decrease in the Late-Season Typhoon Activity over the Western North Pacific*. Journal of Climate, 2014, 27, 4296-4312.	1.2	89
86	Moisture Asymmetry and MJO Eastward Propagation in an Aquaplanet General Circulation Model*. Journal of Climate, 2014, 27, 8747-8760.	1.2	40
87	Characteristics of tropical cyclones in highâ€resolution models in the present climate. Journal of Advances in Modeling Earth Systems, 2014, 6, 1154-1172.	1.3	111
88	Exploratory analysis of extremely low tropical cyclone activity during the lateâ€season of 2010 and 1998 over the western <scp>N</scp>orth <scp>P</scp>acific and the <scp>S</scp>outh <scp>C</scp>hina <scp>S</scp>ea. Journal of Advances in Modeling Earth Systems, 2014, 6, 1141-1153.	1.3	20
89	Mechanism of the Indian Ocean Tropical Cyclone Frequency Changes due to Global Warming. , 2014, , 40-49.		8
90	Annual maximum 5-day rainfall total and maximum number of consecutive dry days over Central America and the Caribbean in the late twenty-first century projected by an atmospheric general circulation model with three different horizontal resolutions. Theoretical and Applied Climatology, 2014, 116, 155-168.	1.3	30

#	Article	IF	Citations
91	Caribbean lowâ€level jets and accompanying moisture fluxes in a global warming climate projected with <scp>CMIP3</scp> multiâ€model ensemble and fineâ€mesh atmospheric general circulation models. International Journal of Climatology, 2014, 34, 964-977.	1.5	21
92	Tropical cyclones in reanalysis data sets. Geophysical Research Letters, 2014, 41, 2133-2141.	1.5	125
93	Future Changes in Tropical Cyclone Activity in the North Indian Ocean Projected by the New High-Resolution MRI-AGCM. , 2014, , 65-71.		3
94	Future changes in tropical cyclone activity in the North Indian Ocean projected by high-resolution MRI-AGCMs. Climate Dynamics, 2013, 40, 1949-1968.	1.7	63
95	Resolution dependence of tropical cyclone formation in CMIP3 and finer resolution models. Climate Dynamics, 2013, 40, 585-599.	1.7	73
96	Will the South Asian monsoon overturning circulation stabilize any further?. Climate Dynamics, 2013, 40, 187-211.	1.7	144
97	Projected increase in tropical cyclones near Hawaii. Nature Climate Change, 2013, 3, 749-754.	8.1	88
98	Future change of the global monsoon revealed from 19 CMIP5 models. Journal of Geophysical Research D: Atmospheres, 2013, 118, 1247-1260.	1.2	117
99	Attribution of Projected Future Changes in Tropical Cyclone Passage Frequency over the Western North Pacific. Journal of Climate, 2013, 26, 4096-4111.	1.2	30
100	Changes to environmental parameters that control tropical cyclone genesis under global warming. Geophysical Research Letters, 2013, 40, 2265-2270.	1.5	19
101	Multi-Model Ensemble Projection of Future Tropical Cyclone Characteristics due to Global Climate Change. Journal of Japan Society of Civil Engineers Ser B2 (Coastal Engineering), 2012, 68, I_1251-I_1255.	0.0	0
102	Future Changes in Tropical Cyclone Activity Projected by the New High-Resolution MRI-AGCM. Journal of Climate, 2012, 25, 3237-3260.	1.2	342
103	Future changes in tropical cyclone activity projected by multi-physics and multi-SST ensemble experiments using the 60-km-mesh MRI-AGCM. Climate Dynamics, 2012, 39, 2569-2584.	1.7	174
104	Increase of global monsoon area and precipitation under global warming: A robust signal?. Geophysical Research Letters, 2012, 39, .	1.5	114
105	On the Mechanism of Tropical Cyclone Frequency Changes Due to Global Warming. Journal of the Meteorological Society of Japan, 2012, 90A, 397-408.	0.7	54
106	Climate Simulations Using MRI-AGCM3.2 with 20-km Grid. Journal of the Meteorological Society of Japan, 2012, 90A, 233-258.	0.7	413
107	Future Change of Western North Pacific Typhoons: Projections by a 20-km-Mesh Global Atmospheric Model*. Journal of Climate, 2011, 24, 1154-1169.	1.2	187
108	Effect of Model Resolution on Tropical Cyclone Climate Projections. Scientific Online Letters on the Atmosphere, 2010, 6, 73-76.	0.6	141

#	Article	IF	Citations
109	Future Change of North Atlantic Tropical Cyclone Tracks: Projection by a 20-km-Mesh Global Atmospheric Model*. Journal of Climate, 2010, 23, 2699-2721.	1.2	188
110	Climate control of the global tropical storm days (1965â€“2008). Geophysical Research Letters, 2010, 37, .	1.5	56
111	The Tropical Cyclone Climate Model Intercomparison Project. , 2010, , 1-24.		11
112	A Reduction in Global Tropical Cyclone Frequency due to Global Warming. Scientific Online Letters on the Atmosphere, 2009, 5, 164-167.	0.6	105
113	Verification of Typhoon Forecasts for a 20 km-mesh High-Resolution Global Model. Journal of the Meteorological Society of Japan, 2008, 86, 669-698.	0.7	6
114	Development of an Effective Non-Linear Normal-Mode Initialization Method for a High-Resolution Global Model. Journal of the Meteorological Society of Japan, 2007, 85, 187-208.	0.7	40