

L Ruby Leung

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/3938237/l-ruby-leung-publications-by-year.pdf>

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

322
papers

14,820
citations

66
h-index

112
g-index

428
ext. papers

17,855
ext. citations

5.8
avg, IF

6.75
L-index

#	Paper	IF	Citations
322	Trends in surface equivalent potential temperature: A more comprehensive metric for global warming and weather extremes.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022 , 119,	11.5	10
321	Urbanization Impact on Regional Climate and Extreme Weather: Current Understanding, Uncertainties, and Future Research Directions.. <i>Advances in Atmospheric Sciences</i> , 2022 , 1-42	2.9	8
320	An Observationally Trained Markov Model for MJO Propagation. <i>Geophysical Research Letters</i> , 2022 , 49,	4.9	0
319	Conservation of dry air, water, and energy in CAM and its potential impact on tropical rainfall. <i>Journal of Climate</i> , 2022 , 1-74	4.4	0
318	Threat by marine heatwaves to adaptive large marine ecosystems in an eddy-resolving model. <i>Nature Climate Change</i> , 2022 , 12, 179-186	21.4	3
317	A new large-scale suspended sediment model and its application over the United States. <i>Hydrology and Earth System Sciences</i> , 2022 , 26, 665-688	5.5	3
316	Representing Global Soil Erosion and Sediment Flux in Earth System Models. <i>Journal of Advances in Modeling Earth Systems</i> , 2022 , 14, e2021MS002756	7.1	2
315	Advances in hexagon mesh-based flow direction modeling. <i>Advances in Water Resources</i> , 2022 , 160, 104099	4.7	2
314	Median bed-material sediment particle size across rivers in the contiguous US. <i>Earth System Science Data</i> , 2022 , 14, 929-942	10.5	0
313	Abrupt emissions reductions during COVID-19 contributed to record summer rainfall in China.. <i>Nature Communications</i> , 2022 , 13, 959	17.4	4
312	Exploratory precipitation metrics: spatiotemporal characteristics, process-oriented, and phenomena-based. <i>Journal of Climate</i> , 2022 , 1-55	4.4	3
311	Increases in Future AR Count and Size: Overview of the ARTMIP Tier 2 CMIP5/6 Experiment. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022 , 127,	4.4	8
310	Datasets for characterizing extreme events relevant to hydrologic design over the conterminous United States.. <i>Scientific Data</i> , 2022 , 9, 154	8.2	0
309	Better calibration of cloud parameterizations and subgrid effects increases the fidelity of the E3SM Atmosphere Model version 1. <i>Geoscientific Model Development</i> , 2022 , 15, 2881-2916	6.3	0
308	Characterizing the Impact of Atmospheric Rivers on Aerosols in the Western U.S.. <i>Geophysical Research Letters</i> , 2022 , 49,	4.9	1
307	Mesoscale Convective Systems in a Superparameterized E3SM Simulation at High Resolution. <i>Journal of Advances in Modeling Earth Systems</i> , 2022 , 14,	7.1	1
306	North China Plain as a hot spot of ozone pollution exacerbated by extreme high temperatures. <i>Atmospheric Chemistry and Physics</i> , 2022 , 22, 4705-4719	6.8	0

305	The uncertain role of rising atmospheric CO ₂ on global plant transpiration. <i>Earth-Science Reviews</i> , 2022 , 104055	10.2	1
304	Modeling impacts of ice-nucleating particles from marine aerosols on mixed-phase orographic clouds during 2015 ACAPEX field campaign. <i>Atmospheric Chemistry and Physics</i> , 2022 , 22, 6749-6771	6.8	0
303	Uncertainty in El Niño-like warming and California precipitation changes linked by the Interdecadal Pacific Oscillation. <i>Nature Communications</i> , 2021 , 12, 6484	17.4	2
302	Multiscale Simulation of Precipitation Over East Asia by Variable Resolution CAM-MPAS. <i>Journal of Advances in Modeling Earth Systems</i> , 2021 , 13, e2021MS002656	7.1	2
301	Seasonally dependent future changes in the US Midwest hydroclimate and extremes. <i>Journal of Climate</i> , 2021 , 1-35	4.4	1
300	A parameterization of sub-grid topographical effects on solar radiation in the E3SM Land Model (version 1.0): implementation and evaluation over the Tibetan Plateau. <i>Geoscientific Model Development</i> , 2021 , 14, 6273-6289	6.3	5
299	Early warm-season mesoscale convective systems dominate soil moisture-precipitation feedback for summer rainfall in central United States. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	4
298	HyRiver: Hydroclimate Data Retriever. <i>Journal of Open Source Software</i> , 2021 , 6, 3175	5.2	0
297	The Leading Modes of Asian Summer Monsoon Variability as Pulses of Atmospheric Energy Flow. <i>Geophysical Research Letters</i> , 2021 , 48, e2020GL091629	4.9	1
296	Meteorological Environments Associated With California Wildfires and Their Potential Roles in Wildfire Changes During 1984-2017. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021 , 126, e2020JD033180	4.4	6
295	The Relationship between Precipitation and Precipitable Water in CMIP6 Simulations and Implications for Tropical Climatology and Change. <i>Journal of Climate</i> , 2021 , 34, 1587-1600	4.4	5
294	A high-resolution unified observational data product of mesoscale convective systems and isolated deep convection in the United States for 2004-2017. <i>Earth System Science Data</i> , 2021 , 13, 827-856	10.5	8
293	A Global High-Resolution Mesoscale Convective System Database Using Satellite-Derived Cloud Tops, Surface Precipitation, and Tracking. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021 , 126, e2020JD034202	4.4	17
292	Representation of Plant Hydraulics in the Noah-MP Land Surface Model: Model Development and Multiscale Evaluation. <i>Journal of Advances in Modeling Earth Systems</i> , 2021 , 13, e2020MS002214	7.1	11
291	Evaluation of Mesoscale Convective Systems in Climate Simulations: Methodological Development and Results from MPAS-CAM over the United States. <i>Journal of Climate</i> , 2021 , 34, 2611-2633	4.4	14
290	Increased extreme rains intensify erosional nitrogen and phosphorus fluxes to the northern Gulf of Mexico in recent decades. <i>Environmental Research Letters</i> , 2021 , 16, 054080	6.2	3
289	Disentangling the Effects of Vapor Pressure Deficit and Soil Water Availability on Canopy Conductance in a Seasonal Tropical Forest During the 2015 El Niño Drought. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021 , 126, e2021JD035004	4.4	3
288	Characterizing Uncertainties in Ground Truth of Precipitation Over Complex Terrain Through High-Resolution Numerical Modeling. <i>Geophysical Research Letters</i> , 2021 , 48, e2020GL091950	4.9	1

287	Linking Flood Frequency With Mesoscale Convective Systems in the US. <i>Geophysical Research Letters</i> , 2021 , 48, e2021GL092546	4.9	3
286	Identifying Key Drivers of Wildfires in the Contiguous US Using Machine Learning and Game Theory Interpretation. <i>Earth's Future</i> , 2021 , 9, e2020EF001910	7.9	9
285	Intercomparison of Thermal Regime Algorithms in 1-D Lake Models. <i>Water Resources Research</i> , 2021 , 57, e2020WR028776	5.4	1
284	Convection-Permitting Hindcasting of Diurnal Variation of Mei-yu Rainfall Over East China With a Global Variable-Resolution Model. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021 , 126, e2021JD034823	4.4	4
283	Subtropical Eastern North Pacific SST Bias in Earth System Models. <i>Journal of Geophysical Research: Oceans</i> , 2021 , 126, e2021JC017359	3.3	0
282	Impact of Initialized Land Surface Temperature and Snowpack on Subseasonal to Seasonal Prediction Project, Phase I (LS4P-I): organization and experimental design. <i>Geoscientific Model Development</i> , 2021 , 14, 4465-4494	6.3	4
281	Intensified Humid Heat Events Under Global Warming. <i>Geophysical Research Letters</i> , 2021 , 48, e2020GL091462	7.1	3
280	Double-ITCZ as an Emergent Constraint for Future Precipitation Over Mediterranean Climate Regions in the North Hemisphere. <i>Geophysical Research Letters</i> , 2021 , 48, e2020GL091569	4.9	7
279	Future Changes in the Great Plains Low-Level Jet Governed by Seasonally Dependent Pattern Changes in the North Atlantic Subtropical High. <i>Geophysical Research Letters</i> , 2021 , 48, e2020GL090356	4.9	2
278	Significant Land Contributions to Interannual Predictability of East Asian Summer Monsoon Rainfall. <i>Earth's Future</i> , 2021 , 9, e2020EF001762	7.9	4
277	Validation and Sensitivity Analysis of a 1-D Lake Model Across Global Lakes. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021 , 126, e2020JD033417	4.4	2
276	Winter Precipitation Changes in California Under Global Warming: Contributions of CO ₂ , Uniform SST Warming, and SST Change Patterns. <i>Geophysical Research Letters</i> , 2021 , 48, e2020GL091736	4.9	0
275	Summer Mean and Extreme Precipitation Over the Mid-Atlantic Region: Climatological Characteristics and Contributions From Different Precipitation Types. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021 , 126, e2021JD035045	4.4	2
274	Global Mesoscale Convective System Latent Heating Characteristics from GPM Retrievals and an MCS Tracking Dataset. <i>Journal of Climate</i> , 2021 , 1-53	4.4	2
273	Crucial Roles of Eastward Propagating Environments in the Summer MCS Initiation Over the U.S. Great Plains. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021 , 126, e2021JD034991	4.4	2
272	Multiple Metrics Informed Projections of Future Precipitation in China. <i>Geophysical Research Letters</i> , 2021 , 48, e2021GL093810	4.9	2
271	Mesoscale Convective Systems Dominate the Energetics of the South Asian Summer Monsoon Onset. <i>Geophysical Research Letters</i> , 2021 , 48, e2021GL094873	4.9	1
270	Extreme metrics from large ensembles: investigating the effects of ensemble size on their estimates. <i>Earth System Dynamics</i> , 2021 , 12, 1427-1501	4.8	1

269	Urbanization Amplifies Nighttime Heat Stress on Warmer Days Over the US. <i>Geophysical Research Letters</i> , 2021 , 48,	4.9	6
268	Spatial pattern of lake evaporation increases under global warming linked to regional hydroclimate change. <i>Communications Earth & Environment</i> , 2021 , 2,	6.1	2
267	An Introduction to the E3SM Special Collection: Goals, Science Drivers, Development, and Analysis. <i>Journal of Advances in Modeling Earth Systems</i> , 2020 , 12, e2019MS001821	7.1	14
266	Nonlinear effect of compound extreme weather events on ozone formation over the United States. <i>Weather and Climate Extremes</i> , 2020 , 30, 100285	6	5
265	Global Irrigation Characteristics and Effects Simulated by Fully Coupled Land Surface, River, and Water Management Models in E3SM. <i>Journal of Advances in Modeling Earth Systems</i> , 2020 , 12, e2020MS002069 ⁸	7.1	8
264	The pantropical response of soil moisture to El Niño. <i>Hydrology and Earth System Sciences</i> , 2020 , 24, 2303-2322	3.9	7
263	Potential Impacts of Assimilating All-Sky Satellite Infrared Radiances on Convection-Permitting Analysis and Prediction of Tropical Convection. <i>Monthly Weather Review</i> , 2020 , 148, 3203-3224	2.4	5
262	Impact of Dust-Cloud-Radiation-Precipitation Dynamical Feedback on Subseasonal-to-Seasonal Variability of the Asian Summer Monsoon in Global Variable-Resolution Simulations With MPAS-CAM5. <i>Frontiers in Earth Science</i> , 2020 , 8,	3.5	6
261	Responses and impacts of atmospheric rivers to climate change. <i>Nature Reviews Earth & Environment</i> , 2020 , 1, 143-157	30.2	82
260	Watershed delineation on a hexagonal mesh grid. <i>Environmental Modelling and Software</i> , 2020 , 128, 104302	3.02	9
259	Spatiotemporal Characteristics and Propagation of Summer Extreme Precipitation Events Over United States: A Complex Network Analysis. <i>Geophysical Research Letters</i> , 2020 , 47, e2020GL088185	4.9	8
258	Exploring Topography-Based Methods for Downscaling Subgrid Precipitation for Use in Earth System Models. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020 , 125, e2019JD031456	4.4	6
257	Significant Contribution of Mesoscale Overtuning to Tropical Mass and Energy Transport Revealed by the ERA5 Reanalysis. <i>Geophysical Research Letters</i> , 2020 , 47, e2019GL085333	4.9	6
256	River Regulation Alleviates the Impacts of Climate Change on U.S. Thermoelectricity Production. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020 , 125, e2019JD031618	4.4	5
255	The Ongoing Need for High-Resolution Regional Climate Models: Process Understanding and Stakeholder Information. <i>Bulletin of the American Meteorological Society</i> , 2020 , 101, E664-E683	6.1	45
254	Observed Warm-Season Characteristics of MCS and Non-MCS Rainfall and Their Recent Changes in the Central United States. <i>Geophysical Research Letters</i> , 2020 , 47, e2019GL086783	4.9	16
253	Neutral modes of surface temperature and the optimal ocean thermal forcing for global cooling. <i>Npj Climate and Atmospheric Science</i> , 2020 , 3,	8	2
252	Initial Results From the Super-Parameterized E3SM. <i>Journal of Advances in Modeling Earth Systems</i> , 2020 , 12, e2019MS001863	7.1	9

251	Effects of Groundwater Pumping on Ground Surface Temperature: A Regional Modeling Study in the North China Plain. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020 , 125, e2019JD031764	4.4	3
250	Pronounced Impact of Salinity on Rapidly Intensifying Tropical Cyclones. <i>Bulletin of the American Meteorological Society</i> , 2020 , 101, E1497-E1511	6.1	18
249	Benchmarking Simulated Precipitation in Earth System Models. <i>Bulletin of the American Meteorological Society</i> , 2020 , 101, E814-E816	6.1	4
248	Sensitivity of Surface Temperature to Oceanic Forcing via q-Flux Green's Function Experiments. Part III: Asymmetric Response to Warming and Cooling. <i>Journal of Climate</i> , 2020 , 33, 1283-1297	4.4	5
247	Understanding the Distinct Impacts of MCS and Non-MCS Rainfall on the Surface Water Balance in the Central United States Using a Numerical Water-Tagging Technique. <i>Journal of Hydrometeorology</i> , 2020 , 21, 2343-2357	3.7	6
246	Modeling the smoky troposphere of the southeast Atlantic: a comparison to ORACLES airborne observations from September of 2016. <i>Atmospheric Chemistry and Physics</i> , 2020 , 20, 11491-11526	6.8	16
245	Impacts of Insolation and Soil Moisture on the Seasonality of Interactions Between the Madden-Julian Oscillation and Maritime Continent. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020 , 125,	4.4	1
244	Dust dominates high-altitude snow darkening and melt over high-mountain Asia. <i>Nature Climate Change</i> , 2020 , 10, 1045-1051	21.4	40
243	A substantial role of soil erosion in the land carbon sink and its future changes. <i>Global Change Biology</i> , 2020 , 26, 2642	11.4	16
242	Aerosols in the E3SM Version 1: New Developments and Their Impacts on Radiative Forcing. <i>Journal of Advances in Modeling Earth Systems</i> , 2020 , 12, e2019MS001851	7.1	27
241	Evaluating next-generation intensity-duration-frequency curves for design flood estimates in the snow-dominated western United States. <i>Hydrological Processes</i> , 2020 , 34, 1255-1268	3.3	7
240	Response of Landfalling Atmospheric Rivers on the U.S. West Coast to Local Sea Surface Temperature Perturbations. <i>Geophysical Research Letters</i> , 2020 , 47, e2020GL089254	4.9	4
239	Climate change impacts on wind power generation. <i>Nature Reviews Earth & Environment</i> , 2020 , 1, 627-643	30.2	29
238	Contrasting Phase Changes of Precipitation Annual Cycle Between Land and Ocean Under Global Warming. <i>Geophysical Research Letters</i> , 2020 , 47, e2020GL090327	4.9	8
237	Characterizing Tropical Cyclones in the Energy Exascale Earth System Model Version 1. <i>Journal of Advances in Modeling Earth Systems</i> , 2020 , 12, e2019MS002024	7.1	11
236	DPSIR-ESA Vulnerability Assessment (DEVA) Framework: Synthesis, Foundational Overview, and Expert Case Studies. <i>Transactions of the ASABE</i> , 2020 , 63, 741-752	0.9	2
235	Comparison of Equilibrium Climate Sensitivity Estimates From Slab Ocean, 150-Year, and Longer Simulations. <i>Geophysical Research Letters</i> , 2020 , 47, e2020GL088852	4.9	7
234	Enhanced Predictability of Eastern North Pacific Tropical Cyclone Activity Using the ENSO Longitude Index. <i>Geophysical Research Letters</i> , 2020 , 47, e2020GL088849	4.9	1

233	The DOE E3SM v1.1 Biogeochemistry Configuration: Description and Simulated Ecosystem-Climate Responses to Historical Changes in Forcing. <i>Journal of Advances in Modeling Earth Systems</i> , 2020 , 12, e2019MS001766	7.1	24
232	Contrasting Recent and Future ITCZ Changes From Distinct Tropical Warming Patterns. <i>Geophysical Research Letters</i> , 2020 , 47, e2020GL089846	4.9	2
231	Characteristics of Ice Nucleating Particles in and Around California Winter Storms. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 11530-11551	4.4	11
230	A Multilayer Reservoir Thermal Stratification Module for Earth System Models. <i>Journal of Advances in Modeling Earth Systems</i> , 2019 , 11, 3265-3283	7.1	6
229	Substantial ozone enhancement over the North China Plain from increased biogenic emissions due to heat waves and land cover in summer 2017 2019 ,		1
228	Spatiotemporal Characteristics and Large-Scale Environments of Mesoscale Convective Systems East of the Rocky Mountains. <i>Journal of Climate</i> , 2019 , 32, 7303-7328	4.4	47
227	Modeling the contributions of Northern Hemisphere dust sources to dust outflow from East Asia. <i>Atmospheric Environment</i> , 2019 , 202, 234-243	5.3	26
226	Improving Land Surface Temperature Simulation in CoLM Over the Tibetan Plateau Through Fractional Vegetation Cover Derived From a Remotely Sensed Clumping Index and Model-Simulated Leaf Area Index. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 2620-2642	4.4	9
225	Seesaw haze pollution in North China modulated by the sub-seasonal variability of atmospheric circulation. <i>Atmospheric Chemistry and Physics</i> , 2019 , 19, 565-576	6.8	34
224	Modeling the Impacts of Urbanization on Summer Thermal Comfort: The Role of Urban Land Use and Anthropogenic Heat. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 6681-6697	4.4	29
223	Impacts of Spatial Heterogeneity and Temporal Non-Stationarity on Intensity-Duration-Frequency Estimates: A Case Study in a Mountainous California-Nevada Watershed. <i>Water (Switzerland)</i> , 2019 , 11, 1296	3	7
222	Mechanisms for an Amplified Precipitation Seasonal Cycle in the U.S. West Coast under Global Warming. <i>Journal of Climate</i> , 2019 , 32, 4681-4698	4.4	18
221	Regional Snow Parameters Estimation for Large-Domain Hydrological Applications in the Western United States. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 5296-5313	4.4	18
220	Next-Generation Intensity-Duration-Frequency Curves to Reduce Errors in Peak Flood Design. <i>Journal of Hydrologic Engineering - ASCE</i> , 2019 , 24, 04019020	1.8	14
219	Modeling analysis of the swell and wind-sea climate in the Salish Sea. <i>Estuarine, Coastal and Shelf Science</i> , 2019 , 224, 289-300	2.9	11
218	The DOE E3SM Coupled Model Version 1: Overview and Evaluation at Standard Resolution. <i>Journal of Advances in Modeling Earth Systems</i> , 2019 , 11, 2089-2129	7.1	217
217	Impacts of climate change and emissions on atmospheric oxidized nitrogen deposition over East Asia. <i>Atmospheric Chemistry and Physics</i> , 2019 , 19, 887-900	6.8	11
216	Impact of Atmospheric Rivers on Surface Hydrological Processes in Western U.S. Watersheds. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 8896-8916	4.4	25

215	Contrasting Spring and Summer Large-Scale Environments Associated with Mesoscale Convective Systems over the U.S. Great Plains. <i>Journal of Climate</i> , 2019 , 32, 6749-6767	4.4	33
214	A Zonal Migration of Monsoon Moisture Flux Convergence and the Strength of Madden-Julian Oscillation Events. <i>Geophysical Research Letters</i> , 2019 , 46, 8554-8562	4.9	5
213	Development and Evaluation of an Ensemble-Based Data Assimilation System for Regional Reanalysis Over the Tibetan Plateau and Surrounding Regions. <i>Journal of Advances in Modeling Earth Systems</i> , 2019 , 11, 2503-2522	7.1	21
212	Modeling extreme precipitation over East China with a global variable-resolution modeling framework (MPASv5.2): impacts of resolution and physics. <i>Geoscientific Model Development</i> , 2019 , 12, 2707-2726	6.3	9
211	The Community Land Model Version 5: Description of New Features, Benchmarking, and Impact of Forcing Uncertainty. <i>Journal of Advances in Modeling Earth Systems</i> , 2019 , 11, 4245-4287	7.1	288
210	North American extreme precipitation events and related large-scale meteorological patterns: a review of statistical methods, dynamics, modeling, and trends. <i>Climate Dynamics</i> , 2019 , 53, 6835-6875	4.2	35
209	Parallel Distributed Hydrology Soil Vegetation Model (DHSVM) using global arrays. <i>Environmental Modelling and Software</i> , 2019 , 122, 104533	5.2	5
208	The DOE E3SM Coupled Model Version 1: Description and Results at High Resolution. <i>Journal of Advances in Modeling Earth Systems</i> , 2019 , 11, 4095-4146	7.1	50
207	Incorporating Climate Nonstationarity and Snowmelt Processes in Intensity-Duration-Frequency Analyses with Case Studies in Mountainous Areas. <i>Journal of Hydrometeorology</i> , 2019 , 20, 2331-2346	3.7	6
206	An Overview of the Atmospheric Component of the Energy Exascale Earth System Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2019 , 11, 2377-2411	7.1	85
205	Contributions of Extreme and Non-Extreme Precipitation to California Precipitation Seasonality Changes Under Warming. <i>Geophysical Research Letters</i> , 2019 , 46, 13470-13478	4.9	9
204	Flood Inundation Generation Mechanisms and Their Changes in 1953-2004 in Global Major River Basins. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 11672-11692	4.4	6
203	Extreme Wet-Bulb Temperatures in China: The Significant Role of Moisture. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 11944-11960	4.4	6
202	Substantial ozone enhancement over the North China Plain from increased biogenic emissions due to heat waves and land cover in summer 2017. <i>Atmospheric Chemistry and Physics</i> , 2019 , 19, 12195-12207	6.8	43
201	On the variable effects of climate change on Pacific salmon. <i>Ecological Modelling</i> , 2019 , 397, 95-106	3	6
200	Enhancing Hydrologic Design by Next-Generation Intensity-Duration-Frequency Curves Considering Snowmelt and Climate Nonstationarity 2019 ,		1
199	A Framework to Delineate Precipitation-Runoff Regimes: Precipitation Versus Snowpack in the Western United States. <i>Geophysical Research Letters</i> , 2019 , 46, 13044-13053	4.9	4
198	Trans-Pacific transport and evolution of aerosols: spatiotemporal characteristics and source contributions. <i>Atmospheric Chemistry and Physics</i> , 2019 , 19, 12709-12730	6.8	17

197	Quantifying Dissolved Organic Carbon Dynamics Using a Three-Dimensional Terrestrial Ecosystem Model at High Spatial-Temporal Resolutions. <i>Journal of Advances in Modeling Earth Systems</i> , 2019 , 11, 4489-4512	7.1	4
196	The Atmospheric River Tracking Method Intercomparison Project (ARTMIP): Quantifying Uncertainties in Atmospheric River Climatology. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 13777-13802	4.4	75
195	Better monsoon precipitation in coupled climate models due to bias compensation. <i>Npj Climate and Atmospheric Science</i> , 2019 , 2,	8	16
194	Observed Spatiotemporal Changes in the Mechanisms of Extreme Water Available for Runoff in the Western United States. <i>Geophysical Research Letters</i> , 2019 , 46, 767-775	4.9	15
193	Defining Uncertainties through Comparison of Atmospheric River Tracking Methods. <i>Bulletin of the American Meteorological Society</i> , 2019 , 100, ES93-ES96	6.1	11
192	Effects of Ensemble Configuration on Estimates of Regional Climate Uncertainties. <i>Geophysical Research Letters</i> , 2018 , 45, 926-934	4.9	3
191	Remote Drying in the North Atlantic as a Common Response to Precessional Changes and CO2 Increase Over Land. <i>Geophysical Research Letters</i> , 2018 , 45, 3615-3624	4.9	9
190	How Do Microphysical Processes Influence Large-Scale Precipitation Variability and Extremes?. <i>Geophysical Research Letters</i> , 2018 , 45, 1661-1667	4.9	8
189	Next-Generation Intensity-Duration-Frequency Curves for Hydrologic Design in Snow-Dominated Environments. <i>Water Resources Research</i> , 2018 , 54, 1093-1108	5.4	34
188	Seasonally dependent responses of subtropical highs and tropical rainfall to anthropogenic warming. <i>Nature Climate Change</i> , 2018 , 8, 787-792	21.4	41
187	Roles of SST versus Internal Atmospheric Variability in Winter Extreme Precipitation Variability along the U.S. West Coast. <i>Journal of Climate</i> , 2018 , 31, 8039-8058	4.4	28
186	Increasing Magnitude of Hurricane Rapid Intensification in the Central and Eastern Tropical Atlantic. <i>Geophysical Research Letters</i> , 2018 , 45, 4238-4247	4.9	45
185	PhysicsDynamics Coupling in Weather, Climate, and Earth System Models: Challenges and Recent Progress. <i>Monthly Weather Review</i> , 2018 , 146, 3505-3544	2.4	36
184	Sensitivity of Surface Temperature to Oceanic Forcing via q-Flux Green's Function Experiments. Part I: Linear Response Function. <i>Journal of Climate</i> , 2018 , 31, 3625-3641	4.4	19
183	Role of Troposphere-Convection-Land Coupling in the Southwestern Amazon Precipitation Bias of the Community Earth System Model Version 1 (CESM1). <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 8374-8399	4.4	13
182	100 Years of Progress in Hydrology. <i>Meteorological Monographs</i> , 2018 , 59, 25.1-25.51	5.7	10
181	Impact of numerical choices on water conservation in the E3SM Atmosphere Model version 1 (EAMv1). <i>Geoscientific Model Development</i> , 2018 , 11, 1971-1988	6.3	23
180	Modeling Sediment Yield in Land Surface and Earth System Models: Model Comparison, Development, and Evaluation. <i>Journal of Advances in Modeling Earth Systems</i> , 2018 , 10, 2192-2213	7.1	19

179	Parametric Sensitivity and Uncertainty Quantification in the Version 1 of E3SM Atmosphere Model Based on Short Perturbed Parameter Ensemble Simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 13,046	4.4	34
178	Sensitivity of the ITCZ Location to Ocean Forcing Via Q-Flux Green's Function Experiments. <i>Geophysical Research Letters</i> , 2018 , 45, 13,116	4.9	6
177	Structure and Evolution of Mesoscale Convective Systems: Sensitivity to Cloud Microphysics in Convection-Permitting Simulations Over the United States. <i>Journal of Advances in Modeling Earth Systems</i> , 2018 , 10, 1470-1494	7.1	86
176	Future Changes of Subseasonal Precipitation Variability in North America During Winter Under Global Warming. <i>Geophysical Research Letters</i> , 2018 , 45, 12,467	4.9	13
175	Contribution of hurricane-induced sediment resuspension to coastal oxygen dynamics. <i>Scientific Reports</i> , 2018 , 8, 15740	4.9	17
174	Shape of Atlantic Tropical Cyclone Tracks and the Indian Monsoon. <i>Geophysical Research Letters</i> , 2018 , 45, 10,746	4.9	6
173	Atmospheric River Tracking Method Intercomparison Project (ARTMIP): project goals and experimental design. <i>Geoscientific Model Development</i> , 2018 , 11, 2455-2474	6.3	144
172	Atmospheric River Tracking Method Intercomparison Project (ARTMIP): Project Goals and Experimental Design 2018 ,		1
171	Sensitivity of Surface Temperature to Oceanic Forcing via q-Flux Green's Function Experiments. Part II: Feedback Decomposition and Polar Amplification. <i>Journal of Climate</i> , 2018 , 31, 6745-6761	4.4	9
170	Future Changes in Seasonality of the North Pacific and North Atlantic Subtropical Highs. <i>Geophysical Research Letters</i> , 2018 , 45, 11,959	4.9	25
169	Predictability of Extreme Precipitation in Western U.S. Watersheds Based on Atmospheric River Occurrence, Intensity, and Duration. <i>Geophysical Research Letters</i> , 2018 , 45, 11,693	4.9	27
168	Response of the Hydrological Cycle in Asian Monsoon Systems to Global Warming Through the Lens of Water Vapor Wave Activity Analysis. <i>Geophysical Research Letters</i> , 2018 , 45, 11,904	4.9	7
167	A New Global Storage-Area-Depth Data Set for Modeling Reservoirs in Land Surface and Earth System Models. <i>Water Resources Research</i> , 2018 , 54, 10,372	5.4	23
166	Influence of Atmospheric Rivers on Mountain Snowpack in the Western United States. <i>Journal of Climate</i> , 2018 , 31, 9921-9940	4.4	22
165	Impacts of compound extreme weather events on ozone in the present and future. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 9861-9877	6.8	33
164	Aerosol and Urban Land Use Effect on Rainfall Around Cities in Indo-Gangetic Basin From Observations and Cloud Resolving Model Simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 3645-3667	4.4	19
163	Urbanization Effect on Winter Haze in the Yangtze River Delta Region of China. <i>Geophysical Research Letters</i> , 2018 , 45, 6710-6718	4.9	26
162	Multiscale Atmospheric Overturning of the Indian Summer Monsoon as Seen through Isentropic Analysis. <i>Journals of the Atmospheric Sciences</i> , 2018 , 75, 3011-3030	2.1	15

161	Characteristics of Bay of Bengal Monsoon Depressions in the 21st Century. <i>Geophysical Research Letters</i> , 2018 , 45, 6637-6645	4.9	15
160	Examining the Hydrological Variations in an Aquaplanet World Using Wave Activity Transformation. <i>Journal of Climate</i> , 2017 , 30, 2559-2576	4.4	7
159	Sensitivity of U.S. summer precipitation to model resolution and convective parameterizations across gray zone resolutions. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 2714-2733	4.4	63
158	Establishing a Numerical Modeling Framework for Hydrologic Engineering Analyses of Extreme Storm Events. <i>Journal of Hydrologic Engineering - ASCE</i> , 2017 , 22, 04017016	1.8	4
157	Large Contribution of Coarse Mode to Aerosol Microphysical and Optical Properties: Evidence from Ground-Based Observations of a Transpacific Dust Outbreak at a High-Elevation North American Site. <i>Journals of the Atmospheric Sciences</i> , 2017 , 74, 1431-1443	2.1	3
156	Contribution of urbanization to the increase of extreme heat events in an urban agglomeration in east China. <i>Geophysical Research Letters</i> , 2017 , 44, 6940-6950	4.9	100
155	Effects of spatially distributed sectoral water management on the redistribution of water resources in an integrated water model. <i>Water Resources Research</i> , 2017 , 53, 4253-4270	5.4	27
154	Understanding Flood Seasonality and Its Temporal Shifts within the Contiguous United States. <i>Journal of Hydrometeorology</i> , 2017 , 18, 1997-2009	3.7	29
153	Exploring the effects of a nonhydrostatic dynamical core in high-resolution aquaplanet simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 3245-3265	4.4	15
152	Dam Construction in Lancang-Mekong River Basin Could Mitigate Future Flood Risk From Warming-Induced Intensified Rainfall. <i>Geophysical Research Letters</i> , 2017 , 44, 10,378-10,386	4.9	48
151	Exploring new topography-based subgrid spatial structures for improving land surface modeling. <i>Geoscientific Model Development</i> , 2017 , 10, 873-888	6.3	7
150	Impact of numerical choices on water conservation in the E3SM Atmosphere Model Version 1 (EAM V1) 2017 ,		1
149	Hydroclimatic Variability and Predictability: A Survey of Recent Research. <i>Hydrology and Earth System Sciences</i> , 2017 , 21, 3777-3798	5.5	21
148	Influence of Superparameterization and a Higher-Order Turbulence Closure on Rainfall Bias Over Amazonia in Community Atmosphere Model Version 5. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 9879-9902	4.4	9
147	Nonlinear Filtering Effects of Reservoirs on Flood Frequency Curves at the Regional Scale. <i>Water Resources Research</i> , 2017 , 53, 8277-8292	5.4	21
146	Environments of Long-Lived Mesoscale Convective Systems Over the Central United States in Convection Permitting Climate Simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 13,288	4.4	34
145	A Global Data Analysis for Representing Sediment and Particulate Organic Carbon Yield in Earth System Models. <i>Water Resources Research</i> , 2017 , 53, 10674-10700	5.4	11
144	Probable Maximum Precipitation in the U.S. Pacific Northwest in a Changing Climate. <i>Water Resources Research</i> , 2017 , 53, 9600-9622	5.4	24

143	Sources of errors in the simulation of south Asian summer monsoon in the CMIP5 GCMs. <i>Climate Dynamics</i> , 2017 , 49, 193-223	4.2	52
142	Influence of landscape heterogeneity on water available to tropical forests in an Amazonian catchment and implications for modeling drought response. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 8410-8426	4.4	14
141	Hydrological Drought in the Anthropocene: Impacts of Local Water Extraction and Reservoir Regulation in the U.S.. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 11,313-11,328	4.4	35
140	Effects of cloud condensation nuclei and ice nucleating particles on precipitation processes and supercooled liquid in mixed-phase orographic clouds. <i>Atmospheric Chemistry and Physics</i> , 2017 , 17, 1017-1035	6.8	42
139	Urbanization-induced urban heat island and aerosol effects on climate extremes in the Yangtze River Delta region of China. <i>Atmospheric Chemistry and Physics</i> , 2017 , 17, 5439-5457	6.8	82
138	Significant impacts of irrigation water sources and methods on modeling irrigation effects in the ACME Land Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2017 , 9, 1665-1683	7.1	40
137	Modeling surface water dynamics in the Amazon Basin using MOSART-Inundation-v1.0: Impacts of geomorphological parameters and river flow representation. <i>Geoscientific Model Development</i> , 2017 , 10, 1233-1259	6.3	33
136	Effects of Cloud Condensation Nuclei and Ice Nucleating Particles on Precipitation Processes and Supercooled Liquid in Mixed-phase Orographic Clouds 2016 ,		1
135	Uncertainties in Projecting Future Changes in Atmospheric Rivers and Their Impacts on Heavy Precipitation over Europe. <i>Journal of Climate</i> , 2016 , 29, 6711-6726	4.4	59
134	Implementing and Evaluating Variable Soil Thickness in the Community Land Model, Version 4.5 (CLM4.5). <i>Journal of Climate</i> , 2016 , 29, 3441-3461	4.4	36
133	A projection of changes in landfalling atmospheric river frequency and extreme precipitation over western North America from the Large Ensemble CESM simulations. <i>Geophysical Research Letters</i> , 2016 , 43, 1357-1363	4.9	101
132	Impact of buildings on surface solar radiation over urban Beijing. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 5841-5852	6.8	9
131	Exploring the impacts of physics and resolution on aqua-planet simulations from a nonhydrostatic global variable-resolution modeling framework. <i>Journal of Advances in Modeling Earth Systems</i> , 2016 , 8, 1751-1768	7.1	18
130	Simulating county-level crop yields in the Conterminous United States using the Community Land Model: The effects of optimizing irrigation and fertilization. <i>Journal of Advances in Modeling Earth Systems</i> , 2016 , 8, 1912-1931	7.1	21
129	Mechanisms Contributing to Suppressed Precipitation in Mt. Hua of Central China. Part I: Mountain Valley Circulation. <i>Journals of the Atmospheric Sciences</i> , 2016 , 73, 1351-1366	2.1	24
128	North American extreme temperature events and related large scale meteorological patterns: a review of statistical methods, dynamics, modeling, and trends. <i>Climate Dynamics</i> , 2016 , 46, 1151-1184	4.2	142
127	Classification of hydrological parameter sensitivity and evaluation of parameter transferability across 431 US MOPEX basins. <i>Journal of Hydrology</i> , 2016 , 536, 92-108	6	16
126	Trans-Pacific transport and evolution of aerosols: evaluation of quasi-global WRF-Chem simulation with multiple observations. <i>Geoscientific Model Development</i> , 2016 , 9, 1725-1746	6.3	48

125	High Resolution Model Intercomparison Project (HighResMIP) 2016 ,		5
124	High Resolution Model Intercomparison Project (HighResMIPv1.0) for CMIP6. <i>Geoscientific Model Development</i> , 2016 , 9, 4185-4208	6.3	396
123	More frequent intense and long-lived storms dominate the springtime trend in central US rainfall. <i>Nature Communications</i> , 2016 , 7, 13429	17.4	114
122	Sources and pathways of the upscale effects on the Southern Hemisphere jet in MPAS-CAM4 variable-resolution simulations. <i>Journal of Advances in Modeling Earth Systems</i> , 2016 , 8, 1786-1805	7.1	19
121	The Role of Climate Covariability on Crop Yields in the Conterminous United States. <i>Scientific Reports</i> , 2016 , 6, 33160	4.9	40
120	Dominating Controls For Wetter South Asian Summer Monsoon in the Twenty-First Century. <i>Journal of Climate</i> , 2015 , 28, 3400-3419	4.4	25
119	Evaluating Global Streamflow Simulations by a Physically Based Routing Model Coupled with the Community Land Model. <i>Journal of Hydrometeorology</i> , 2015 , 16, 948-971	3.7	55
118	A review on regional convection-permitting climate modeling: Demonstrations, prospects, and challenges. <i>Reviews of Geophysics</i> , 2015 , 53, 323-361	23.1	614
117	Substantial contribution of anthropogenic air pollution to catastrophic floods in Southwest China. <i>Geophysical Research Letters</i> , 2015 , 42, 6066-6075	4.9	105
116	21st century United States emissions mitigation could increase water stress more than the climate change it is mitigating. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 10635-40	11.5	104
115	Persistent cold air outbreaks over North America in a warming climate. <i>Environmental Research Letters</i> , 2015 , 10, 044001	6.2	29
114	Toward the Dynamical Convergence on the Jet Stream in Aquaplanet AGCMs. <i>Journal of Climate</i> , 2015 , 28, 6763-6782	4.4	35
113	Investigating the nexus of climate, energy, water, and land at decision-relevant scales: the Platform for Regional Integrated Modeling and Analysis (PRIMA). <i>Climatic Change</i> , 2015 , 129, 573-588	4.5	98
112	BioEarth: Envisioning and developing a new regional earth system model to inform natural and agricultural resource management. <i>Climatic Change</i> , 2015 , 129, 555-571	4.5	26
111	A modeling study of irrigation effects on global surface water and groundwater resources under a changing climate. <i>Journal of Advances in Modeling Earth Systems</i> , 2015 , 7, 1285-1304	7.1	73
110	A case study of urbanization impact on summer precipitation in the Greater Beijing Metropolitan Area: Urban heat island versus aerosol effects. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015 , 120, 10,903-10,914	4.4	64
109	Modeling stream temperature in the Anthropocene: An earth system modeling approach. <i>Journal of Advances in Modeling Earth Systems</i> , 2015 , 7, 1661-1679	7.1	21
108	Dynamical and thermodynamical modulations on future changes of landfalling atmospheric rivers over western North America. <i>Geophysical Research Letters</i> , 2015 , 42, 7179-7186	4.9	111

107	Dynamic Potential Intensity: An improved representation of the ocean's impact on tropical cyclones. <i>Geophysical Research Letters</i> , 2015 , 42, 6739-6746	4.9	49
106	Improving the representation of hydrologic processes in Earth System Models. <i>Water Resources Research</i> , 2015 , 51, 5929-5956	5.4	260
105	Variation of the radiative properties during black carbon aging: theoretical and experimental intercomparison. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 11967-11980	6.8	98
104	A global model simulation for 3-D radiative transfer impact on surface hydrology over the Sierra Nevada and Rocky Mountains. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 5405-5413	6.8	11
103	Local finite-amplitude wave activity as an objective diagnostic of midlatitude extreme weather. <i>Geophysical Research Letters</i> , 2015 , 42, 10,952	4.9	40
102	Assessing the relative influence of surface soil moisture and ENSO SST on precipitation predictability over the contiguous United States. <i>Geophysical Research Letters</i> , 2015 , 42, 5005-5013	4.9	21
101	Accelerating the spin-up of the coupled carbon and nitrogen cycle model in CLM4. <i>Geoscientific Model Development</i> , 2015 , 8, 781-789	6.3	9
100	Exploring a Multiresolution Approach Using AMIP Simulations. <i>Journal of Climate</i> , 2015 , 28, 5549-5574	4.4	42
99	Resolution and Dynamical Core Dependence of Atmospheric River Frequency in Global Model Simulations. <i>Journal of Climate</i> , 2015 , 28, 2764-2776	4.4	60
98	Regional modeling of dust mass balance and radiative forcing over East Asia using WRF-Chem. <i>Aeolian Research</i> , 2014 , 15, 15-30	3.9	85
97	The Dependence of ITCZ Structure on Model Resolution and Dynamical Core in Aquaplanet Simulations. <i>Journal of Climate</i> , 2014 , 27, 2375-2385	4.4	32
96	Links between flood frequency and annual water balance behaviors: A basis for similarity and regionalization. <i>Water Resources Research</i> , 2014 , 50, 937-953	5.4	25
95	WRF-Chem simulations of aerosols and anthropogenic aerosol radiative forcing in East Asia. <i>Atmospheric Environment</i> , 2014 , 92, 250-266	5.3	69
94	Scalability of grid- and subbasin-based land surface modeling approaches for hydrologic simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014 , 119, 3166-3184	4.4	11
93	Increase in the intensity of postmonsoon Bay of Bengal tropical cyclones. <i>Geophysical Research Letters</i> , 2014 , 41, 3594-3601	4.9	94
92	The robust dynamical contribution to precipitation extremes in idealized warming simulations across model resolutions. <i>Geophysical Research Letters</i> , 2014 , 41, 2971-2978	4.9	23
91	Stochastic parameterization for light absorption by internally mixed BC/dust in snow grains for application to climate models. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014 , 119, 7616-7632	4.4	60
90	Simulating black carbon and dust and their radiative forcing in seasonal snow: a case study over North China with field campaign measurements. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 11475-11491	6.8	81

89	Aerosol impacts on California winter clouds and precipitation during CalWater 2011: local pollution versus long-range transported dust. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 81-101	6.8	77
88	Cyclone-cyclone interactions through the ocean pathway. <i>Geophysical Research Letters</i> , 2014 , 41, 6855-6862	4.9	25
87	Robust spring drying in the southwestern U.S. and seasonal migration of wet/dry patterns in a warmer climate. <i>Geophysical Research Letters</i> , 2014 , 41, 1745-1751	4.9	54
86	A subbasin-based framework to represent land surface processes in an Earth system model. <i>Geoscientific Model Development</i> , 2014 , 7, 947-963	6.3	23
85	Black carbon radiative forcing over the Tibetan Plateau. <i>Geophysical Research Letters</i> , 2014 , 41, 7806-7813	4.9	74
84	Investigation of aerosol indirect effects using a cumulus microphysics parameterization in a regional climate model. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014 , 119, 906-926	4.4	32
83	Water Balance in the Amazon Basin from a Land Surface Model Ensemble. <i>Journal of Hydrometeorology</i> , 2014 , 15, 2586-2614	3.7	54
82	Modeling the Effects of Groundwater-Fed Irrigation on Terrestrial Hydrology over the Conterminous United States. <i>Journal of Hydrometeorology</i> , 2014 , 15, 957-972	3.7	98
81	Sensitivity of global terrestrial gross primary production to hydrologic states simulated by the Community Land Model using two runoff parameterizations. <i>Journal of Advances in Modeling Earth Systems</i> , 2014 , 6, 658-679	7.1	39
80	Steady state estimation of soil organic carbon using satellite-derived canopy leaf area index. <i>Journal of Advances in Modeling Earth Systems</i> , 2014 , 6, 1049-1064	7.1	4
79	Atmospheric Moisture Budget and Spatial Resolution Dependence of Precipitation Extremes in Aquaplanet Simulations. <i>Journal of Climate</i> , 2014 , 27, 3565-3581	4.4	31
78	Eddy fluxes and sensitivity of the water cycle to spatial resolution in idealized regional aquaplanet model simulations. <i>Climate Dynamics</i> , 2014 , 42, 931-940	4.2	5
77	A Physically Based Runoff Routing Model for Land Surface and Earth System Models. <i>Journal of Hydrometeorology</i> , 2013 , 14, 808-828	3.7	137
76	A Hierarchical Evaluation of Regional Climate Simulations. <i>Eos</i> , 2013 , 94, 297-298	1.5	33
75	Climate change projections of the North American Regional Climate Change Assessment Program (NARCCAP). <i>Climatic Change</i> , 2013 , 120, 965-975	4.5	150
74	Characterization of speciated aerosol direct radiative forcing over California. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 2372-2388	4.4	52
73	Uncertainty Analysis of Runoff Simulations and Parameter Identifiability in the Community Land Model: Evidence from MOPEX Basins. <i>Journal of Hydrometeorology</i> , 2013 , 14, 1754-1772	3.7	47
72	Observed Scaling in Clouds and Precipitation and Scale Incognizance in Regional to Global Atmospheric Models. <i>Journal of Climate</i> , 2013 , 26, 9313-9333	4.4	40

71	Error Characteristics of Two Grid Refinement Approaches in Aquaplanet Simulations: MPAS-A and WRF. <i>Monthly Weather Review</i> , 2013 , 141, 3022-3036	2.4	34
70	Microphysical effects determine macrophysical response for aerosol impacts on deep convective clouds. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, E4581-90	11.5	220
69	Enhancing the representation of subgrid land surface characteristics in land surface models. <i>Geoscientific Model Development</i> , 2013 , 6, 1609-1622	6.3	14
68	A generic biogeochemical module for Earth system models: Next Generation BioGeoChemical Module (NGBGC), version 1.0. <i>Geoscientific Model Development</i> , 2013 , 6, 1977-1988	6.3	7
67	Numerical issues associated with compensating and competing processes in climate models: an example from ECHAM-HAM. <i>Geoscientific Model Development</i> , 2013 , 6, 861-874	6.3	18
66	Modeling the transport and radiative forcing of Taklimakan dust over the Tibetan Plateau: A case study in the summer of 2006. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 797-812	4.4	109
65	Oceanic control of Northeast Pacific hurricane activity at interannual timescales. <i>Environmental Research Letters</i> , 2013 , 8, 044009	6.2	21
64	Uncertainty in modeling dust mass balance and radiative forcing from size parameterization. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 10733-10753	6.8	90
63	A WRF simulation of the impact of 3-D radiative transfer on surface hydrology over the Rocky Mountains and Sierra Nevada. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 11709-11721	6.8	18
62	Modeling the effects of irrigation on land surface fluxes and states over the conterminous United States: Sensitivity to input data and model parameters. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 9789-9803	4.4	91
61	Estimating the radiative forcing of carbonaceous aerosols over California based on satellite and ground observations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 11,148-11,160	4.4	21
60	Uncertainty quantification and parameter tuning in the CAM5 Zhang-McFarlane convection scheme and impact of improved convection on the global circulation and climate. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 395-415	4.4	89
59	Inverse modeling of hydrologic parameters using surface flux and runoff observations in the Community Land Model. <i>Hydrology and Earth System Sciences</i> , 2013 , 17, 4995-5011	5.5	19
58	On an improved sub-regional water resources management representation for integration into earth system models. <i>Hydrology and Earth System Sciences</i> , 2013 , 17, 3605-3622	5.5	83
57	One-way coupling of an integrated assessment model and a water resources model: evaluation and implications of future changes over the US Midwest. <i>Hydrology and Earth System Sciences</i> , 2013 , 17, 4555-4575	5.5	46
56	Aerosol impacts on clouds and precipitation in eastern China: Results from bin and bulk microphysics. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		131
55	Sensitivity of surface flux simulations to hydrologic parameters based on an uncertainty quantification framework applied to the Community Land Model. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		78
54	Comparison of dynamically and statistically downscaled seasonal climate forecasts for the cold season over the United States. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		23

53	A new global river network database for macroscale hydrologic modeling. <i>Water Resources Research</i> , 2012 , 48,	5.4	93
52	Development of high resolution land surface parameters for the Community Land Model 2012 ,		7
51	Potential aerosol indirect effects on atmospheric circulation and radiative forcing through deep convection. <i>Geophysical Research Letters</i> , 2012 , 39, n/a-n/a	4.9	82
50	Ocean barrier layers' effect on tropical cyclone intensification. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 14343-7	11.5	158
49	Development of high resolution land surface parameters for the Community Land Model. <i>Geoscientific Model Development</i> , 2012 , 5, 1341-1362	6.3	65
48	Impact of the Desert dust on the summer monsoon system over Southwestern North America. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 3717-3731	6.8	64
47	Simulating 3-D radiative transfer effects over the Sierra Nevada Mountains using WRF. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 9965-9976	6.8	19
46	Sensitivity studies on the impacts of Tibetan Plateau snowpack pollution on the Asian hydrological cycle and monsoon climate. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 1929-1948	6.8	233
45	Radiative impact of mineral dust on monsoon precipitation variability over West Africa. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 1879-1893	6.8	182
44	Evaluating runoff simulations from the Community Land Model 4.0 using observations from flux towers and a mountainous watershed. <i>Journal of Geophysical Research</i> , 2011 , 116, n/a-n/a		95
43	Climate-soil-vegetation control on groundwater table dynamics and its feedbacks in a climate model. <i>Climate Dynamics</i> , 2011 , 36, 57-81	4.2	57
42	The spatial distribution of mineral dust and its shortwave radiative forcing over North Africa: modeling sensitivities to dust emissions and aerosol size treatments. <i>Atmospheric Chemistry and Physics</i> , 2010 , 10, 8821-8838	6.8	208
41	Regional climate model projections for the State of Washington. <i>Climatic Change</i> , 2010 , 102, 51-75	4.5	105
40	Downscaling hydroclimatic changes over the Western US based on CAM subgrid scheme and WRF regional climate simulations. <i>International Journal of Climatology</i> , 2009 , 30, n/a-n/a	3.5	18
39	Effects of aerosols on the dynamics and microphysics of squall lines simulated by spectral bin and bulk parameterization schemes. <i>Journal of Geophysical Research</i> , 2009 , 114,		54
38	Dominant role by vertical wind shear in regulating aerosol effects on deep convective clouds. <i>Journal of Geophysical Research</i> , 2009 , 114,		216
37	Effects of soot-induced snow albedo change on snowpack and hydrological cycle in western United States based on Weather Research and Forecasting chemistry and regional climate simulations. <i>Journal of Geophysical Research</i> , 2009 , 114,		105
36	Heavy pollution suppresses light rain in China: Observations and modeling. <i>Journal of Geophysical Research</i> , 2009 , 114,		219

35	Atmospheric rivers induced heavy precipitation and flooding in the western U.S. simulated by the WRF regional climate model. <i>Geophysical Research Letters</i> , 2009 , 36, n/a-n/a	4.9	209
34	Contribution of land-atmosphere coupling to summer climate variability over the contiguous United States. <i>Journal of Geophysical Research</i> , 2008 , 113,		66
33	A Generalized Subsurface Flow Parameterization Considering Subgrid Spatial Variability of Recharge and Topography. <i>Journal of Hydrometeorology</i> , 2008 , 9, 1151-1171	3.7	14
32	Variability of solar radiation under cloud-free skies in China: The role of aerosols. <i>Geophysical Research Letters</i> , 2007 , 34,	4.9	149
31	A long-term regional simulation and observations of the hydroclimate in China. <i>Journal of Geophysical Research</i> , 2007 , 112,		58
30	Research Needs and Directions of Regional Climate Modeling Using WRF and CCSM. <i>Bulletin of the American Meteorological Society</i> , 2006 , 87, 1747-1752	6.1	106
29	More frequent cloud-free sky and less surface solar radiation in China from 1955 to 2000. <i>Geophysical Research Letters</i> , 2006 , 33, n/a-n/a	4.9	215
28	Potential regional climate change and implications to U.S. air quality. <i>Geophysical Research Letters</i> , 2005 , 32,	4.9	140
27	Regional Climate Modeling: Progress, Challenges, and Prospects. <i>Journal of the Meteorological Society of Japan</i> , 2004 , 82, 1599-1628	2.8	336
26	Hydrologic Implications of Dynamical and Statistical Approaches to Downscaling Climate Model Outputs. <i>Climatic Change</i> , 2004 , 62, 189-216	4.5	1227
25	Mid-Century Ensemble Regional Climate Change Scenarios for the Western United States. <i>Climatic Change</i> , 2004 , 62, 75-113	4.5	295
24	A new multiscale flow network generation scheme for land surface models. <i>Geophysical Research Letters</i> , 2004 , 31,	4.9	15
23	MIRAGE: Model description and evaluation of aerosols and trace gases. <i>Journal of Geophysical Research</i> , 2004 , 109,		216
22	Hydroclimate of the Western United States Based on Observations and Regional Climate Simulation of 1981-2000. Part I: Seasonal Statistics. <i>Journal of Climate</i> , 2003 , 16, 1892-1911	4.4	118
21	Hydroclimate of the Western United States Based on Observations and Regional Climate Simulation of 1981-2000. Part II: Mesoscale ENSO Anomalies. <i>Journal of Climate</i> , 2003 , 16, 1912-1928	4.4	64
20	The Sensitivity of Precipitation and Snowpack Simulations to Model Resolution via Nesting in Regions of Complex Terrain. <i>Journal of Hydrometeorology</i> , 2003 , 4, 1025-1043	3.7	119
19	Pacific Northwest Climate Sensitivity Simulated by a Regional Climate Model Driven by a GCM. Part I: Control Simulations. <i>Journal of Climate</i> , 1999 , 12, 2010-2030	4.4	73
18	POTENTIAL CLIMATE CHANGE IMPACTS ON MOUNTAIN WATERSHEDS IN THE PACIFIC NORTHWEST1. <i>Journal of the American Water Resources Association</i> , 1999 , 35, 1463-1471	2.1	71

17	Pacific Northwest Climate Sensitivity Simulated by a Regional Climate Model Driven by a GCM. Part II: 2002 Simulations. <i>Journal of Climate</i> , 1999 , 12, 2031-2053	4.4	96
16	Parameterizing Subgrid Orographic Precipitation and Surface Cover in Climate Models. <i>Monthly Weather Review</i> , 1998 , 126, 3271-3291	2.4	80
15	Application of a subgrid orographic precipitation/surface hydrology scheme to a mountain watershed. <i>Journal of Geophysical Research</i> , 1996 , 101, 12803-12817		41
14	A subgrid parameterization of orographic precipitation. <i>Theoretical and Applied Climatology</i> , 1995 , 52, 95-118	3	91
13	A simple framework to characterize land aridity based on surface energy partitioning regimes. <i>Environmental Research Letters</i> ,	6.2	
12	A WRF simulation of the impact of 3-D radiative transfer on surface hydrology over the Rocky Sierra Mountains		1
11	Uncertainty in modeling dust mass balance and radiative forcing from size parameterization		1
10	Aerosol impacts on California winter clouds and precipitation during CalWater 2011: local pollution vs. long-range transported dust		3
9	A global model simulation for 3-D radiative transfer impact on surface hydrology over Sierra Nevada and Rocky Mountains		1
8	Variation of the radiative properties during black carbon aging: theoretical and experimental intercomparison	2	
7	A subbasin-based framework to represent land surface processes in an Earth System Model		5
6	On an improved sub-regional water resources management representation for integration into earth system models		5
5	Inverse modeling of hydrologic parameters using surface flux and runoff observations in the Community Land Model		2
4	One-way coupling of an integrated assessment model and a water resources model: evaluation and implications of future changes over the US Midwest		3
3	Emergence of seasonal delay of tropical rainfall during 1979-2019. <i>Nature Climate Change</i> ,	21.4	9
2	Impacts of large-scale urbanization and irrigation on summer precipitation in the Mid-Atlantic region of the United States. <i>Geophysical Research Letters</i> ,	4.9	0
1	Impact of rainfall on tropical cyclone-induced sea surface cooling. <i>Geophysical Research Letters</i> ,	4.9	0