Pierre Gentine

List of Publications by Year
in descending order

185 papers	12,140 citations	28274 55 h-index	30922 102 g-index
204 all docs	204 docs citations	204 times ranked	12005 citing authors

#	Article	IF	Citations
1	The Community Land Model Version 5: Description of New Features, Benchmarking, and Impact of Forcing Uncertainty. Journal of Advances in Modeling Earth Systems, 2019, 11, 4245-4287.	3.8	692
2	Deep learning to represent subgrid processes in climate models. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9684-9689.	7.1	420
3	Large influence of soil moisture on long-term terrestrial carbon uptake. Nature, 2019, 565, 476-479.	27.8	409
4	Landâ€“atmospheric feedbacks during droughts and heatwaves: state of the science and current challenges. Annals of the New York Academy of Sciences, 2019, 1436, 19-35.	3.8	407
5	Landâ€“atmosphere feedbacks exacerbate concurrent soil drought and atmospheric aridity. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 18848-18853.	7.1	283
6	Large increase in global storm runoff extremes driven by climate and anthropogenic changes. Nature Communications, 2018, 9, 4389.	12.8	260
7	Could Machine Learning Break the Convection Parameterization Deadlock?. Geophysical Research Letters, 2018, 45, 5742-5751.	4.0	246
8	Soil moistureâ€“atmosphere feedback dominates land carbon uptake variability. Nature, 2021, 592, 65-69.	27.8	241
9	Analysis of evaporative fraction diurnal behaviour. Agricultural and Forest Meteorology, 2007, 143, 13-29.	4.8	233
10	Global variations in ecosystemâ€scale isohydricity. Global Change Biology, 2017, 23, 891-905.	9.5	226
11	Landâ€“Atmosphere Interactions: The LoCo Perspective. Bulletin of the American Meteorological Society, 2018, 99, 1253-1272.	3.3	226
12	A global spatially contiguous solar-induced fluorescence (CSIF) dataset using neural networks. Biogeosciences, 2018, 15, 5779-5800.	3.3	217
13	Probability of afternoon precipitation in easternÂUnited States and Mexico enhanced byÂhigh evaporation. Nature Geoscience, 2011, 4, 434-439.	12.9	213
14	Implementing Plant Hydraulics in the Community Land Model, Version 5. Journal of Advances in Modeling Earth Systems, 2019, 11, 485-513.	3.8	213
15	Projected increases in intensity, frequency, and terrestrial carbon costs of compound drought and aridity events. Science Advances, 2019, 5, eaau5740.	10.3	211
16	Interdependence of climate, soil, and vegetation as constrained by the Budyko curve. Geophysical Research Letters, 2012, 39, .	4.0	210
17	The impact of anthropogenic land use and land cover change on regional climate extremes. Nature Communications, 2017, 8, 989.	12.8	207
18	Sensitivity of grassland productivity to aridity controlled by stomatal and xylem regulation. Nature Geoscience, 2017, 10, 284-288.	12.9	200

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19	Regionally strong feedbacks between the atmosphere and terrestrial biosphere. Nature Geoscience, 2017, 10, 410-414.	12.9	197
20	Heat stored in the Earth system: where does the energy go?. Earth System Science Data, 2020, 12, 2013-2041.	9.9	181
21	Critical impact of vegetation physiology on the continental hydrologic cycle in response to increasing CO ₂. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4093-4098.	7.1	179
22	Reviews and syntheses: Turning the challenges of partitioning ecosystem evaporation and transpiration into opportunities. Biogeosciences, 2019, 16, 3747-3775.	3.3	150
23	Surface and Atmospheric Controls on the Onset of Moist Convection over Land. Journal of Hydrometeorology, 2013, 14, 1443-1462.	1.9	144
24	Potential for natural evaporation as a reliable renewable energy resource. Nature Communications, 2017, 8, 617.	12.8	141
25	Soil moistureâ€“atmosphere feedbacks mitigate declining water availability in drylands. Nature Climate Change, 2021, 11, 38-44.	18.8	138
26	Interannual Coupling between Summertime Surface Temperature and Precipitation over Land: Processes and Implications for Climate Change*. Journal of Climate, 2015, 28, 1308-1328.	3.2	135
27	When Does Vapor Pressure Deficit Drive or Reduce Evapotranspiration?. Journal of Advances in Modeling Earth Systems, 2019, 11, 3305-3320.	3.8	134
28	Impact of Soil Moistureâ€“Atmosphere Interactions on Surface Temperature Distribution. Journal of Climate, 2014, 27, 7976-7993.	3.2	129
29	Physicsâ€Constrained Machine Learning of Evapotranspiration. Geophysical Research Letters, 2019, 46, 14496-14507.	4.0	129
30	Tall Amazonian forests are less sensitive to precipitation variability. Nature Geoscience, 2018, 11, 405-409.	12.9	126
31	Enforcing Analytic Constraints in Neural Networks Emulating Physical Systems. Physical Review Letters, 2021, 126, 098302.	7.8	124
32	Coupling between the terrestrial carbon and water cyclesâ€”a review. Environmental Research Letters, 2019, 14, 083003.	5.2	118
33	The Diurnal Behavior of Evaporative Fraction in the Soilâ€“Vegetationâ€“Atmospheric Boundary Layer Continuum. Journal of Hydrometeorology, 2011, 12, 1530-1546.	1.9	111
34	A simple and objective method to partition evapotranspiration into transpiration and evaporation at eddy-covariance sites. Agricultural and Forest Meteorology, 2019, 265, 171-182.	4.8	111
35	Atmospheric dryness reduces photosynthesis along a large range of soil water deficits. Nature Communications, 2022, 13, 989.	12.8	100
36	Amazon rainforest photosynthesis increases in response to atmospheric dryness. Science Advances, 2020, 6, .	10.3	98

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37	Vulnerability of Antarcticaâ€™s ice shelves to meltwater-driven fracture. Nature, 2020, 584, 574-578.	27.8	98
38	Water, Energy, and Carbon with Artificial Neural Networks (WECANN): a statistically based estimate of global surface turbulent fluxes and gross primary productivity using solar-induced fluorescence. Biogeosciences, 2017, 14, 4101-4124.	3.3	97
39	Satellite and In Situ Observations for Advancing Global Earth Surface Modelling: A Review. Remote Sensing, 2018, 10, 2038.	4.0	95
40	Light limitation regulates the response of autumn terrestrial carbon uptake to warming. Nature Climate Change, 2020, 10, 739-743.	18.8	94
41	Reconstructed Solarâ€Induced Fluorescence: A Machine Learning Vegetation Product Based on MODIS Surface Reflectance to Reproduce GOMEâ€2 Solarâ€Induced Fluorescence. Geophysical Research Letters, 2018, 45, 3136-3146.	4.0	93
42	Redefining droughts for the U.S. Corn Belt: The dominant role of atmospheric vapor pressure deficit over soil moisture in regulating stomatal behavior of Maize and Soybean. Agricultural and Forest Meteorology, 2020, 287, 107930.	4.8	90
43	Evaluation and machine learning improvement of global hydrological model-based flood simulations. Environmental Research Letters, 2019, 14, 114027.	5.2	88
44	Dry Deposition of Ozone Over Land: Processes, Measurement, and Modeling. Reviews of Geophysics, 2020, 58, e2019RG000670.	23.0	86
45	Estimating surface soil moisture from SMAP observations using a Neural Network technique. Remote Sensing of Environment, 2018, 204, 43-59.	11.0	85
46	Does the Hook Structure Constrain Future Flood Intensification Under Anthropogenic Climate Warming?. Water Resources Research, 2021, 57, e2020WR028491.	4.2	78
47	Detecting forest response to droughts with global observations of vegetation water content. Global Change Biology, 2021, 27, 6005-6024.	9.5	73
48	Reduced solarâ€induced chlorophyll fluorescence from <scp>GOME</scp>â€2 during Amazon drought caused by dataset artifacts. Global Change Biology, 2018, 24, 2229-2230.	9.5	71
49	Large and projected strengthening moisture limitation on end-of-season photosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9216-9222.	7.1	69
50	Biophysical impacts of Earth greening largely controlled by aerodynamic resistance. Science Advances, 2020, 6, .	10.3	67
51	Land-surface controls on afternoon precipitation diagnosed from observational data: uncertainties and confounding factors. Atmospheric Chemistry and Physics, 2014, 14, 8343-8367.	4.9	63
52	Emergent constraints on equilibrium climate sensitivity in CMIP5: do they hold for CMIP6?. Earth System Dynamics, 2020, 11, 1233-1258.	7.1	63
53	Value of sun-induced chlorophyll fluorescence for quantifying hydrological states and fluxes: Current status and challenges. Agricultural and Forest Meteorology, 2020, 291, 108088.	4.8	62
54	Role of surface heat fluxes underneath cold pools. Geophysical Research Letters, 2016, 43, 874-883.	4.0	61

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55	Diel ecosystem conductance response to vapor pressure deficit is suboptimal and independent of soil moisture. Agricultural and Forest Meteorology, 2018, 250-251, 24-34.	4.8	61
56	Emergent relation between surface vapor conductance and relative humidity profiles yields evaporation rates from weather data. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 6287-6291.	7.1	60
57	Soil Texture Effects on Surface Resistance to Bareâ€Soil Evaporation. Geophysical Research Letters, 2018, 45, 10,398.	4.0	59
58	Hydraulic traits explain differential responses of Amazonian forests to the 2015 El NiÃ±oâ€induced drought. New Phytologist, 2019, 223, 1253-1266.	7.3	58
59	Beyond soil water potential: An expanded view on isohydricity including landâ€"atmosphere interactions and phenology. Plant, Cell and Environment, 2019, 42, 1802-1815.	5.7	57
60	Modeling soil evaporation efficiency in a range of soil and atmospheric conditions using a metaâ€analysis approach. Water Resources Research, 2016, 52, 3663-3684.	4.2	56
61	Monitoring water stress using time series of observed to unstressed surface temperature difference. Agricultural and Forest Meteorology, 2007, 146, 159-172.	4.8	54
62	Failure of Taylor's hypothesis in the atmospheric surface layer and its correction for eddyâ€covariance measurements. Geophysical Research Letters, 2017, 44, 4287-4295.	4.0	54
63	Linking plant functional trait plasticity and the large increase in forest water use efficiency. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 2393-2408.	3.0	54
64	Potential evaporation at eddy-covariance sites across the globe. Hydrology and Earth System Sciences, 2019, 23, 925-948.	4.9	54
65	Evaporation estimates using weather station data and boundary layer theory. Geophysical Research Letters, 2016, 43, 11,661.	4.0	53
66	Soil moisture retrieval from AMSR-E and ASCAT microwave observation synergy. Part 1: Satellite data analysis. Remote Sensing of Environment, 2016, 173, 1-14.	11.0	53
67	Vulnerability of European ecosystems to two compound dry and hot summers in 2018 and 2019. Earth System Dynamics, 2021, 12, 1015-1035.	7.1	49
68	Spatioâ€Temporal Convergence of Maximum Daily Lightâ€Use Efficiency Based on Radiation Absorption by Canopy Chlorophyll. Geophysical Research Letters, 2018, 45, 3508-3519.	4.0	48
69	Global downscaling of remotely sensed soil moisture using neural networks. Hydrology and Earth System Sciences, 2018, 22, 5341-5356.	4.9	48
70	Resolving Contrasting Regional Rainfall Responses to El NiÃ±o over Tropical Africa. Journal of Climate, 2016, 29, 1461-1476.	3.2	46
71	Global patterns of daily CO2 emissions reductions in the first year of COVID-19. Nature Geoscience, 2022, 15, 615-620.	12.9	46
72	Fog and rain in the Amazon. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11473-11477.	7.1	44

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73	Landâ€“atmosphere interactions in the tropics â€“ a review. Hydrology and Earth System Sciences, 2019, 23, 4171-4197.	4.9	43
74	Soil moisture retrieval from AMSR-E and ASCAT microwave observation synergy. Part 2: Product evaluation. Remote Sensing of Environment, 2017, 195, 202-217.	11.0	42
75	Systematic errors in ground heat flux estimation and their correction. Water Resources Research, 2012, 48, .	4.2	41
76	Scaling in Surface Hydrology: Progress and Challenges. Journal of Contemporary Water Research and Education, 2012, 147, 28-40.	0.7	41
77	Emissions rebound from the COVID-19 pandemic. Nature Climate Change, 2022, 12, 412-414.	18.8	41
78	Precipitation Sensitivity to Surface Heat Fluxes over North America in Reanalysis and Model Data. Journal of Hydrometeorology, 2013, 14, 722-743.	1.9	40
79	Water Availability Impacts on Evapotranspiration Partitioning. Agricultural and Forest Meteorology, 2021, 297, 108251.	4.8	39
80	Harmonic propagation of variability in surface energy balance within a coupled soilâ€vegetationâ€atmosphere system. Water Resources Research, 2011, 47, .	4.2	38
81	Measuring Tree Properties and Responses Using Low-Cost Accelerometers. Sensors, 2017, 17, 1098.	3.8	38
82	Implications of Nonlocal Transport and Conditionally Averaged Statistics on Moninâ€“Obukhov Similarity Theory and Townsendâ€™s Attached Eddy Hypothesis. Journals of the Atmospheric Sciences, 2018, 75, 3403-3431.	1.7	37
83	Modification of landâ€atmosphere interactions by CO₂ effects: Implications for summer dryness and heat wave amplitude. Geophysical Research Letters, 2016, 43, 10,240.	4.0	36
84	Can vegetation optical depth reflect changes in leaf water potential during soil moisture dry-down events?. Remote Sensing of Environment, 2019, 234, 111451.	11.0	36
85	Reduction of tropical land region precipitation variability via transpiration. Geophysical Research Letters, 2012, 39, .	4.0	35
86	Sun-induced fluorescence closely linked to ecosystem transpiration as evidenced by satellite data and radiative transfer models. Remote Sensing of Environment, 2020, 249, 112030.	11.0	35
87	Estimating Global Ecosystem Isohydry/Anisohydry Using Active and Passive Microwave Satellite Data. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 3306-3321.	3.0	34
88	Exploring the Potential of Satellite Solar-Induced Fluorescence to Constrain Global Transpiration Estimates. Remote Sensing, 2019, 11, 413.	4.0	34
89	Accounting for canopy structure improves hyperspectral radiative transfer and sun-induced chlorophyll fluorescence representations in a new generation Earth System model. Remote Sensing of Environment, 2021, 261, 112497.	11.0	34
90	An allometryâ€based model of the survival strategies of hydraulic failure and carbon starvation. Ecohydrology, 2016, 9, 529-546.	2.4	33

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91	Enhanced canopy growth precedes senescence in 2005 and 2010 Amazonian droughts. Remote Sensing of Environment, 2018, 211, 26-37.	11.0	33
92	Uncovering exposures responsible for birth season â€“ disease effects: a global study. Journal of the American Medical Informatics Association: JAMIA, 2018, 25, 275-288.	4.4	33
93	Data Length Requirements for Observational Estimates of Landâ€"Atmosphere Coupling Strength. Journal of Hydrometeorology, 2015, 16, 1615-1635.	1.9	32
94	Remote Sensing of Global Daily Evapotranspiration based on a Surface Energy Balance Method and Reanalysis Data. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD032873.	3.3	32
95	Evaluation and mechanism exploration of the diurnal hysteresis of ecosystem fluxes. Agricultural and Forest Meteorology, 2019, 278, 107642.	4.8	31
96	Vapor Pressure Deficit and Sunlight Explain Seasonality of Leaf Phenology and Photosynthesis Across Amazonian Evergreen Broadleaved Forest. Global Biogeochemical Cycles, 2021, 35, e2020GB006893.	4.9	31
97	Recent increase in the observation-derived land evapotranspiration due to global warming. Environmental Research Letters, 2022, 17, 024020.	5.2	31
98	A Probabilistic Bulk Model of Coupled Mixed Layer and Convection. Part II: Shallow Convection Case. Journals of the Atmospheric Sciences, 2013, 70, 1557-1576.	1.7	30
99	Coherent Structures in the Boundary and Cloud Layers: Role of Updrafts, Subsiding Shells, and Environmental Subsidence. Journals of the Atmospheric Sciences, 2016, 73, 1789-1814.	1.7	30
100	Spectral Behaviour of a Coupled Land-Surface and Boundary-Layer System. Boundary-Layer Meteorology, 2010, 134, 157-180.	2.3	29
101	Triggering Deep Convection with a Probabilistic Plume Model. Journals of the Atmospheric Sciences, 2014, 71, 3881-3901.	1.7	29
102	Effects of 3-D thermal radiation on the development of a shallow cumulus cloud field. Atmospheric Chemistry and Physics, 2017, 17, 5477-5500.	4.9	29
103	Vegetation Response to Rising CO₂ Impacts Extreme Temperatures. Geophysical Research Letters, 2019, 46, 1383-1392.	4.0	28
104	An Idealized Prototype for Large-Scale Landâ€"Atmosphere Coupling. Journal of Climate, 2013, 26, 2379-2389.	3.2	26
105	Biophysical impacts of northern vegetation changes on seasonal warming patterns. Nature Communications, 2022, 13, .	12.8	26
106	Evaluation of a simple approach for crop evapotranspiration partitioning and analysis of the water budget distribution for several crop species. Agricultural and Forest Meteorology, 2013, 177, 46-56.	4.8	25
107	The Budyko and complementary relationships in an idealized model of large-scale landâ€"atmosphere coupling. Hydrology and Earth System Sciences, 2015, 19, 2119-2131.	4.9	25
108	Surface Flux Equilibrium Theory Explains an Empirical Estimate of Waterâ€Limited Daily Evapotranspiration. Journal of Advances in Modeling Earth Systems, 2019, 11, 2036-2049.	3.8	25

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109	Diagnosing evaporative fraction over land from boundaryâ€layer clouds. Journal of Geophysical Research D: Atmospheres, 2013, 118, 8185-8196.	3.3	24
110	Near-real-time global gridded daily CO2 emissions. Innovation(China), 2022, 3, 100182.	9.1	24
111	Representation of daytime moist convection over the semiâ€arid Tropics by parametrizations used in climate and meteorological models. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 2220-2236.	2.7	23
112	Effect of Reduced Summer Cloud Shading on Evaporative Demand and Wildfire in Coastal Southern California. Geophysical Research Letters, 2018, 45, 5653-5662.	4.0	23
113	Masi Entropy for Satellite Color Image Segmentation Using Tournament-Based LÃ©vy Multiverse Optimization Algorithm. Remote Sensing, 2019, 11, 942.	4.0	23
114	A Probabilistic Bulk Model of Coupled Mixed Layer and Convection. Part I: Clear-Sky Case. Journals of the Atmospheric Sciences, 2013, 70, 1543-1556.	1.7	22
115	Uncertainties Caused by Resistances in Evapotranspiration Estimation Using High-Density Eddy Covariance Measurements. Journal of Hydrometeorology, 2020, 21, 1349-1365.	1.9	22
116	Long-term relative decline in evapotranspiration with increasing runoff on fractional land surfaces. Hydrology and Earth System Sciences, 2021, 25, 3805-3818.	4.9	22
117	A Closer Look at Boundary Layer Inversion in Large-Eddy Simulations and Bulk Models: Buoyancy-Driven Case. Journals of the Atmospheric Sciences, 2015, 72, 728-749.	1.7	21
118	A phenomenological model of soil evaporative efficiency using surface soil moisture and temperature data. Agricultural and Forest Meteorology, 2018, 256-257, 501-515.	4.8	21
119	Constraining Uncertainty in Projected Gross Primary Production With Machine Learning. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005619.	3.0	21
120	Connections between the hydrological cycle and crop yield in the rainfed U.S. Corn Belt. Journal of Hydrology, 2020, 590, 125398.	5.4	21
121	Patterns of plant rehydration and growth following pulses of soil moisture availability. Biogeosciences, 2021, 18, 831-847.	3.3	21
122	Distinct xylem responses to acute vs prolonged drought in pine trees. Tree Physiology, 2020, 40, 605-620.	3.1	20
123	Assessing the Potential of Deep Learning for Emulating Cloud Superparameterization in Climate Models With Realâ€Geography Boundary Conditions. Journal of Advances in Modeling Earth Systems, 2021, 13, e2020MS002385.	3.8	20
124	Tropical tall forests are more sensitive and vulnerable to drought than short forests. Global Change Biology, 2022, 28, 1583-1595.	9.5	20
125	The <i>k</i>^{â^'1} scaling of air temperature spectra in atmospheric surface layer flows. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 496-505.	2.7	19
126	A comprehensive framework for seasonal controls of leaf abscission and productivity in evergreen broadleaved tropical and subtropical forests. Innovation(China), 2021, 2, 100154.	9.1	19

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127	Mean-velocity profile of smooth channel flow explained by a cospectral budget model with wall-blockage. Physics of Fluids, 2016, 28, .	4.0	18
128	Comment on â€œRecent global decline of CO ₂ fertilization effects on vegetation photosynthesisâ€• Science, 2021, 373, eabg2947.	12.6	18
129	Towards Physically-Consistent, Data-Driven Models of Convection. , 2020, , .		18
130	Development of a Deep Learning Emulator for a Distributed Groundwaterâ€“Surface Water Model: ParFlow-ML. Water (Switzerland), 2021, 13, 3393.	2.7	18
131	Regional and seasonal partitioning of water and temperature controls on global land carbon uptake variability. Nature Communications, 2022, 13, .	12.8	18
132	Neural Networkâ€“Based Sensitivity Analysis of Summertime Convection over the Continental United States. Journal of Climate, 2014, 27, 1958-1979.	3.2	17
133	Role of convective mixing and evaporative cooling in shallow convection. Journal of Geophysical Research D: Atmospheres, 2017, 122, 5351-5363.	3.3	17
134	Disentangling the Effects of Vapor Pressure Deficit and Soil Water Availability on Canopy Conductance in a Seasonal Tropical Forest During the 2015 El NiÃ±o Drought. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035004.	3.3	17
135	The effect of moist convection on thermally induced mesoscale circulations. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 2418-2428.	2.7	16
136	Coherent Structures in Large-Eddy Simulations of a Nonprecipitating Stratocumulus-Topped Boundary Layer. Journals of the Atmospheric Sciences, 2017, 74, 4117-4137.	1.7	16
137	Global Coordination in Plant Physiological and Rooting Strategies in Response to Water Stress. Global Biogeochemical Cycles, 2021, 35, e2020GB006758.	4.9	16
138	Interannual variations in needle and sapwood traits of <i>Pinus edulis</i> branches under an experimental drought. Ecology and Evolution, 2018, 8, 1655-1672.	1.9	15
139	Advances in Land Surface Models and Indicators for Drought Monitoring and Prediction. Bulletin of the American Meteorological Society, 2021, 102, E1099-E1122.	3.3	15
140	Oceanâ€“atmosphere interactions modulate irrigation's climate impacts. Earth System Dynamics, 2016, 7, 863-876.	7.1	15
141	Radiativeâ€“Convective Equilibrium over a Land Surface. Journal of Climate, 2014, 27, 8611-8629.	3.2	14
142	Logarithmic profile of temperature in sheared and unstably stratified atmospheric boundary layers. Physical Review Fluids, 2021, 6, .	2.5	14
143	Shallow groundwater inhibits soil respiration and favors carbon uptake in a wet alpine meadow ecosystem. Agricultural and Forest Meteorology, 2021, 297, 108254.	4.8	13
144	Satellite Observations of the Tropical Terrestrial Carbon Balance and Interactions With the Water Cycle During the 21st Century. Reviews of Geophysics, 2021, 59, e2020RG000711.	23.0	13

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145	PrecipGAN: Merging Microwave and Infrared Data for Satellite Precipitation Estimation Using Generative Adversarial Network. Geophysical Research Letters, 2021, 48, e2020GL092032.	4.0	13
146	The Response of Tropical Organized Convection to El NiÃ±o Warming. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8481-8500.	3.3	12
147	Land Surface Processes Relevant to Sub-seasonal to Seasonal (S2S) Prediction. , 2019, , 165-181.		12
148	Peak growing season patterns and climate extremes-driven responses of gross primary production estimated by satellite and process based models over North America. Agricultural and Forest Meteorology, 2021, 298-299, 108292.	4.8	12
149	Environmental Controls on Tropical Mesoscale Convective System Precipitation Intensity. Journals of the Atmospheric Sciences, 2020, 77, 4233-4249.	1.7	12
150	Improving predictions of evapotranspiration by integrating multi-source observations and land surface model. Agricultural Water Management, 2022, 272, 107827.	5.6	12
151	Climate Classification is an Important Factor in Assessing Quality-of-Care Across Hospitals. Scientific Reports, 2017, 7, 4948.	3.3	11
152	Role of Surface Friction on Shallow Nonprecipitating Convection. Journals of the Atmospheric Sciences, 2018, 75, 163-178.	1.7	11
153	Estimation of Turbulent Heat Fluxes via Assimilation of Air Temperature and Specific Humidity into an Atmospheric Boundary Layer Model. Journal of Hydrometeorology, 2020, 21, 205-225.	1.9	11
154	Two for one: Partitioning CO2 fluxes and understanding the relationship between solar-induced chlorophyll fluorescence and gross primary productivity using machine learning. Agricultural and Forest Meteorology, 2022, 321, 108980.	4.8	11
155	Role of large eddies in the breakdown of the Reynolds analogy in an idealized mildly unstable atmospheric surface layer. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 2182-2197.	2.7	10
156	Reply to â€˜Increases in temperature do not translate to increased floodingâ€™. Nature Communications, 2019, 10, 5675.	12.8	10
157	Interactions Between the Amazonian Rainforest andÂCumuli Clouds: A Largeâ€Eddy Simulation, Highâ€Resolution ECMWF, and Observational Intercomparison Study. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001828.	3.8	10
158	Estimating evapotranspiration using remotely sensed solar-induced fluorescence measurements. Agricultural and Forest Meteorology, 2022, 314, 108800.	4.8	10
159	Amplified warming induced by large-scale application of water-saving techniques. Environmental Research Letters, 2022, 17, 034018.	5.2	10
160	Ideas and perspectives: Treeâ€“atmosphere interaction responds to water-related stem variations. Biogeosciences, 2018, 15, 6439-6449.	3.3	9
161	Mapping daily evapotranspiration over a large irrigation district from MODIS data using a novel hybrid dual-source coupling model. Agricultural and Forest Meteorology, 2019, 276-277, 107612.	4.8	9
162	A Model for Turbulence Spectra in the Equilibrium Range of the Stable Atmospheric Boundary Layer. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032191.	3.3	9

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163	Surface temperatures reveal the patterns of vegetation water stress and their environmental drivers across the tropical Americas. Global Change Biology, 2022, 28, 2940-2955.	9.5	9
164	Coupling between radiative flux divergence and turbulence near the surface. Quarterly Journal of the Royal Meteorological Society, 2018, 144, 2491-2507.	2.7	8
165	Changes in Tropical Precipitation Intensity With El NiÃ±o Warming. Geophysical Research Letters, 2020, 47, e2020GL087663.	4.0	7
166	An observation-driven optimization method for continuous estimation of evaporative fraction over large heterogeneous areas. Remote Sensing of Environment, 2020, 247, 111887.	11.0	7
167	Timing and Order of Extreme Drought and Wetness Determine Bioclimatic Sensitivity of Tree Growth. Earth's Future, 2022, 10, .	6.3	7
168	Deep learning for subgridâ€scale turbulence modeling in largeâ€eddy simulations of the convective atmospheric boundary layer. Journal of Advances in Modeling Earth Systems, 0, , .	3.8	6
169	Probing the Response of Tropical Deep Convection to Aerosol Perturbations Using Idealized Cloud-Resolving Simulations with Parameterized Large-Scale Dynamics. Journals of the Atmospheric Sciences, 2019, 76, 2885-2897.	1.7	5
170	Diurnal and Seasonal Variations of Passive and Active Microwave Satellite Observations Over Tropical Forests. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	3.0	5
171	Large divergence in tropical hydrological projections caused by model spread in vegetation responses to elevated CO ₂. Earth's Future, 0, , .	6.3	5
172	Connection Between Mass Flux Transport and Eddy Diffusivity in Convective Atmospheric Boundary Layers. Geophysical Research Letters, 2021, 48, e2020GL092073.	4.0	4
173	Site Characteristics Mediate the Relationship Between Forest Productivity and Satellite Measured Solar Induced Fluorescence. Frontiers in Forests and Global Change, 2021, 4, .	2.3	4
174	Nonâ€Linear Dimensionality Reduction With a Variational Encoder Decoder to Understand Convective Processes in Climate Models. Journal of Advances in Modeling Earth Systems, 2022, 14, .	3.8	4
175	Estimating cereal evapotranspiration using a simple model driven by satellite data. , 0, , .		3
176	Power-Law Scaling of Turbulence Cospectra for the Stably Stratified Atmospheric Boundary Layer. Boundary-Layer Meteorology, 2020, 177, 1-18.	2.3	3
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