Philippe Ciais

List of Publications by Year
in descending order

946 papers	145,277 citations	100 170 h-index	145 340 g-index
1050 all docs	1050 docs citations	1050 times ranked	78725 citing authors

#	Article	IF	Citations
1	TransCom 3 CO₂ inversion intercomparison: 1. Annual mean control results and sensitivity to transport and prior flux information. Tellus, Series B: Chemical and Physical Meteorology, 2022, 55, 555.	0.8	105
2	Vulnerability of permafrost carbon to global warming. Part I: model description and role of heat generated by organic matter decomposition. Tellus, Series B: Chemical and Physical Meteorology, 2022, 60, 250.	0.8	87
3	Vulnerability of permafrost carbon to global warming. Part II: sensitivity of permafrost carbon stock to global warming. Tellus, Series B: Chemical and Physical Meteorology, 2022, 60, 265.	0.8	57
4	The YAK-AEROSIB transcontinental aircraft campaigns: new insights on the transport of CO₂, CO and O₃ across Siberia. Tellus, Series B: Chemical and Physical Meteorology, 2022, 60, 551.	0.8	61
5	Historical and future perspectives of global soil carbon response to climate and land-use changes. Tellus, Series B: Chemical and Physical Meteorology, 2022, 62, 700.	0.8	103
6	A recent build-up of atmospheric CO₂ over Europe. Part 1: observed signals and possible explanations. Tellus, Series B: Chemical and Physical Meteorology, 2022, 62, 1.	0.8	40
7	The relationship between peak warming and cumulative CO₂ emissions, and its use to quantify vulnerabilities in the carbonâ€“climateâ€“human system. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 145.	0.8	58
8	Decadal trends in the seasonal-cycle amplitude of terrestrial CO₂ exchange resulting from the ensemble of terrestrial biosphere models. Tellus, Series B: Chemical and Physical Meteorology, 2022, 68, 28968.	0.8	31
9	Bidirectional droughtâ€related canopy dynamics across pantropical forests: a satelliteâ€based statistical analysis. Remote Sensing in Ecology and Conservation, 2022, 8, 72-91.	2.2	6
10	Regional trends and drivers of the global methane budget. Global Change Biology, 2022, 28, 182-200.	4.2	56
11	Global maps and factors driving forest foliar elemental composition: the importance of evolutionary history. New Phytologist, 2022, 233, 169-181.	3.5	15
12	Near-real-time global gridded daily CO2 emissions. Innovation(China), 2022, 3, 100182.	5.2	24
13	Dataâ€driven estimates of fertilizerâ€induced soil NH₃, NO and N₂O emissions from croplands in China and their climate change impacts. Global Change Biology, 2022, 28, 1008-1022.	4.2	51
14	Improved global-scale predictions of soil carbon stocks with Millennial Version 2. Soil Biology and Biochemistry, 2022, 164, 108466.	4.2	36
15	Natural forests promote phosphorus retention in soil. Global Change Biology, 2022, 28, 1678-1689.	4.2	13
16	Tropical tall forests are more sensitive and vulnerable to drought than short forests. Global Change Biology, 2022, 28, 1583-1595.	4.2	20
17	Vertical profiles of leaf photosynthesis and leaf traits and soil nutrients in two tropical rainforests in French Guiana before and after a 3-year nitrogen and phosphorus addition experiment. Earth System Science Data, 2022, 14, 5-18.	3.7	6
18	Indicate separate contributions of long-lived and short-lived greenhouse gases in emission targets. Npj Climate and Atmospheric Science, 2022, 5, 5.	2.6	36

#	Article	IF	Citations
19	Impact of Lockdowns and Winter Temperatures on Natural Gas Consumption in Europe. Earth's Future, 2022, 10, .	2.4	10
20	Global Water Scarcity Assessment Incorporating Green Water in Crop Production. Water Resources Research, 2022, 58, .	1.7	19
21	Short-term reduction of regional enhancement of atmospheric CO₂ in China during the first COVID-19 pandemic period. Environmental Research Letters, 2022, 17, 024036.	2.2	6
22	Are Landâ€Use Change Emissions in Southeast Asia Decreasing or Increasing?. Global Biogeochemical Cycles, 2022, 36, .	1.9	7
23	Assessing the Effectiveness of an Urban CO₂ Monitoring Network over the Paris Region through the COVID-19 Lockdown Natural Experiment. Environmental Science & Technology, 2022, 56, 2153-2162.	4.6	20
24	A strong mitigation scenario maintains climate neutrality of northern peatlands. One Earth, 2022, 5, 86-97.	3.6	14
25	Decarbonising the iron and steel sector for a 2â€‰Â°C target using inherent waste streams. Nature Communications, 2022, 13, 297.	5.8	26
26	A new SMAP soil moisture and vegetation optical depth product (SMAP-IB): Algorithm, assessment and inter-comparison. Remote Sensing of Environment, 2022, 271, 112921.	4.6	46
27	French crop yield, area and production data for ten staple crops from 1900 to 2018 at county resolution. Scientific Data, 2022, 9, 38.	2.4	4
28	A large but transient carbon sink from urbanization and rural depopulation in China. Nature Sustainability, 2022, 5, 321-328.	11.5	130
29	Deciphering the multiple effects of climate warming on the temporal shift of leaf unfolding. Nature Climate Change, 2022, 12, 193-199.	8.1	25
30	Global assessment of oil and gas methane ultra-emitters. Science, 2022, 375, 557-561.	6.0	114
31	Pyrogenic carbon decomposition critical to resolving fireâ€™s role in the Earth system. Nature Geoscience, 2022, 15, 135-142.	5.4	22
32	Atmospheric dryness reduces photosynthesis along a large range of soil water deficits. Nature Communications, 2022, 13, 989.	5.8	100
33	Spatiotemporal patterns and drivers of terrestrial dissolved organic carbonÂ(DOC) leaching into the European river network. Earth System Dynamics, 2022, 13, 393-418.	2.7	11
34	Decreasing rainfall frequency contributes to earlier leaf onset in northern ecosystems. Nature Climate Change, 2022, 12, 386-392.	8.1	24
35	Definitions and methods to estimate regional land carbon fluxes for the second phase of the REgional Carbon Cycle Assessment and Processes Project (RECCAP-2). Geoscientific Model Development, 2022, 15, 1289-1316.	1.3	34
36	Retention of deposited ammonium and nitrate and its impact on the global forest carbon sink. Nature Communications, 2022, 13, 880.	5.8	55

#	Article	IF	Citations
37	Surface temperatures reveal the patterns of vegetation water stress and their environmental drivers across the tropical Americas. Global Change Biology, 2022, 28, 2940-2955.	4.2	9
38	Emissions rebound from the COVID-19 pandemic. Nature Climate Change, 2022, 12, 412-414.	8.1	41
39	The land-to-ocean loops of the global carbon cycle. Nature, 2022, 603, 401-410.	13.7	150
40	Global fossil carbon emissions rebound near pre-COVID-19 levels. Environmental Research Letters, 2022, 17, 031001.	2.2	42
41	Monitoring global carbon emissions in 2021. Nature Reviews Earth & Environment, 2022, 3, 217-219.	12.2	215
42	Deficiencies of Phenology Models in Simulating Spatial and Temporal Variations in Temperate Spring Leaf Phenology. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	1.3	6
43	Large CO₂ Emitters as Seen From Satellite: Comparison to a Gridded Global Emission Inventory. Geophysical Research Letters, 2022, 49, .	1.5	23
44	The critical benefits of snowpack insulation and snowmelt for winter wheat productivity. Nature Climate Change, 2022, 12, 485-490.	8.1	19
45	Assessing methane emissions for northern peatlands in ORCHIDEE-PEAT revision 7020. Geoscientific Model Development, 2022, 15, 2813-2838.	1.3	8
46	Nearâ€field atmospheric inversions for the localization and quantification of controlled methane releases using stationary and mobile measurements. Quarterly Journal of the Royal Meteorological Society, 2022, 148, 1886-1912.	1.0	10
47	Direct observations of CO2 emission reductions due to COVID-19 lockdown across European urban districts. Science of the Total Environment, 2022, 830, 154662.	3.9	37
48	Uncovering the critical soil moisture thresholds of plant water stress for European ecosystems. Global Change Biology, 2022, 28, 2111-2123.	4.2	23
49	Global soil organic carbon changes and economic revenues with biochar application. GCB Bioenergy, 2022, 14, 364-377.	2.5	23
50	Doubling of annual forest carbon loss over the tropics during the early twenty-first century. Nature Sustainability, 2022, 5, 444-451.	11.5	47
51	Recent expansion of oil palm plantations into carbon-rich forests. Nature Sustainability, 2022, 5, 574-577.	11.5	14
52	Impact of bioenergy crop expansion on climateâ€“carbon cycle feedbacks in overshoot scenarios. Earth System Dynamics, 2022, 13, 779-794.	2.7	8
53	Field-based tree mortality constraint reduces estimates of model-projected forest carbon sinks. Nature Communications, 2022, 13, 2094.	5.8	8
54	Exploring complex water stressâ€“gross primary production relationships: Impact of climatic drivers, main effects, and interactive effects. Global Change Biology, 2022, 28, 4110-4123.	4.2	37

#	Article	IF	Citations
55	Comparing national greenhouse gas budgets reported in UNFCCC inventories against atmospheric inversions. Earth System Science Data, 2022, 14, 1639-1675.	3.7	58
56	Trade-off between tree planting and wetland conservation in China. Nature Communications, 2022, 13, 1967.	5.8	32
57	Effect of tree demography and flexible root water uptake for modeling the carbon and water cycles of Amazonia. Ecological Modelling, 2022, 469, 109969.	1.2	7
58	Global Carbon Budget 2021. Earth System Science Data, 2022, 14, 1917-2005.	3.7	663
59	Paris Agreement requires substantial, broad, and sustained policy efforts beyond COVID-19 public stimulus packages. Climatic Change, 2022, 172, 1.	1.7	7
60	Observed strong atmospheric water constraints on forest photosynthesis using eddy covariance and satellite-based data across the Northern Hemisphere. International Journal of Applied Earth Observation and Geoinformation, 2022, 110, 102808.	0.9	0
61	Differential impacts of urbanization characteristics on city-level carbon emissions from passenger transport on road: Evidence from 360 cities in China. Building and Environment, 2022, 219, 109165.	3.0	8
62	Bottom-up approaches for estimating terrestrial GHG budgets: Bookkeeping, process-based modeling, and data-driven methods. , 2022, , 59-85.		0
63	Balancing greenhouse gas sources and sinks: Inventories, budgets, and climate policy. , 2022, , 3-28.		0
64	Large loss and rapid recovery of vegetation cover and aboveground biomass over forest areas in Australia during 2019â€"2020. Remote Sensing of Environment, 2022, 278, 113087.	4.6	26
65	How the Glasgow Declaration on Forests can help keep alive the 1.5â€‰Â°C target. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	11
66	Climate Warming Mitigation from Nationally Determined Contributions. Advances in Atmospheric Sciences, 2022, 39, 1217-1228.	1.9	6
67	Climatic and biotic factors influencing regional declines and recovery of tropical forest biomass from the 2015/16 El NiÃ±o. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	13
68	Regional and seasonal partitioning of water and temperature controls on global land carbon uptake variability. Nature Communications, 2022, 13, .	5.8	18
69	Timing and Order of Extreme Drought and Wetness Determine Bioclimatic Sensitivity of Tree Growth. Earth's Future, 2022, 10, .	2.4	7
70	Gridded maps of wetlands dynamics over mid-low latitudes for 1980â€"2020 based on TOPMODEL. Scientific Data, 2022, 9, .	2.4	7
71	Mid-Holocene high-resolution temperature and precipitation gridded reconstructions over China: Implications for elevation-dependent temperature changes. Earth and Planetary Science Letters, 2022, 593, 117656.	1.8	7
72	Global patterns of daily CO2 emissions reductions in the first year of COVID-19. Nature Geoscience, 2022, 15, 615-620.	5.4	46

#	Article	IF	Citations
73	Improved global wetland carbon isotopic signatures support post-2006 microbial methane emission increase. Communications Earth & Environment, 2022, 3, .	2.6	11
74	Climate Change and Weather Extremes in the Eastern Mediterranean and Middle East. Reviews of Geophysics, 2022, 60, .	9.0	131
75	Highâ€Resolution Lagrangian Inverse Modeling of CO₂ Emissions Over the Paris Region During the First 2020 Lockdown Period. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	5
76	Decoupling of greenness and gross primary productivity as aridity decreases. Remote Sensing of Environment, 2022, 279, 113120.	4.6	34
77	The co-evolution of life and organics on earth: Expansions of energy harnessing. Critical Reviews in Environmental Science and Technology, 2021, 51, 603-625.	6.6	2
78	Integrating the evidence for a terrestrial carbon sink caused by increasing atmospheric CO₂. New Phytologist, 2021, 229, 2413-2445.	3.5	286
79	Empirical estimates of regional carbon budgets imply reduced global soil heterotrophic respiration. National Science Review, 2021, 8, nwaa145.	4.6	70
80	Global-scale assessment and inter-comparison of recently developed/reprocessed microwave satellite vegetation optical depth products. Remote Sensing of Environment, 2021, 253, 112208.	4.6	58
81	Changes in Biomass Turnover Times in Tropical Forests and Their Environmental Drivers From 2001 to 2012. Earth's Future, 2021, 9, .	2.4	6
82	Deforestation-induced warming over tropical mountain regions regulated by elevation. Nature Geoscience, 2021, 14, 23-29.	5.4	73
83	Future impacts of climate change on inland Ramsar wetlands. Nature Climate Change, 2021, 11, 45-51.	8.1	103
84	Can N₂O emissions offset the benefits from soil organic carbon storage?. Global Change Biology, 2021, 27, 237-256.	4.2	174
85	Historical and future contributions of inland waters to the Congo Basin carbon balance. Earth System Dynamics, 2021, 12, 37-62.	2.7	13
86	Gridded fossil CO2 emissions and related O2 combustion consistent with national inventories 1959â€“2018. Scientific Data, 2021, 8, 2.	2.4	56
87	Coarse woody debris are buffering mortality-induced carbon losses to the atmosphere in tropical forests. Environmental Research Letters, 2021, 16, 011006.	2.2	12
88	A local- to national-scale inverse modeling system to assess the potential of spaceborne CO₂ measurements for the monitoring of anthropogenic emissions. Atmospheric Measurement Techniques, 2021, 14, 403-433.	1.2	3
89	How much carbon can be added to soil by sorption?. Biogeochemistry, 2021, 152, 127-142.	1.7	27
90	Climate warming from managed grasslands cancels the cooling effect of carbon sinks in sparsely grazed and natural grasslands. Nature Communications, 2021, 12, 118.	5.8	106

#	Article	IF	Citations
91	Empirical support for the biogeochemical niche hypothesis in forest trees. Nature Ecology and Evolution, 2021, 5, 184-194.	3.4	50
92	Dataâ€driven estimates of global litter production imply slower vegetation carbon turnover. Global Change Biology, 2021, 27, 1678-1688.	4.2	8
93	Risk and vulnerability of Mongolian grasslands under climate change. Environmental Research Letters, 2021, 16, 034035.	2.2	46
94	Global irrigation contribution to wheat and maize yield. Nature Communications, 2021, 12, 1235.	5.8	61
95	The Mediterranean Region as a Paradigm of the Global Decoupling of N and P Between Soils and Freshwaters. Global Biogeochemical Cycles, 2021, 35, e2020GB006874.	1.9	9
96	Potential yield simulated by global gridded crop models: using a process-based emulator to explain their differences. Geoscientific Model Development, 2021, 14, 1639-1656.	1.3	6
97	Global synthesis for the scaling of soil microbial nitrogen to phosphorus in terrestrial ecosystems. Environmental Research Letters, 2021, 16, 044034.	2.2	8
98	Reply to: Old-growth forest carbon sinks overestimated. Nature, 2021, 591, E24-E25.	13.7	14
99	Responses of vegetation greenness and carbon cycle to extreme droughts in China. Agricultural and Forest Meteorology, 2021, 298-299, 108307.	1.9	46
100	Soil moistureâ€“atmosphere feedback dominates land carbon uptake variability. Nature, 2021, 592, 65-69.	13.7	241
101	Irrigation, damming, and streamflow fluctuations of the Yellow River. Hydrology and Earth System Sciences, 2021, 25, 1133-1150.	1.9	19
102	Global evaluation of the nutrient-enabled version of the land surface model ORCHIDEE-CNP v1.2 (r5986). Geoscientific Model Development, 2021, 14, 1987-2010.	1.3	22
103	Widespread decline in winds delayed autumn foliar senescence over high latitudes. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	41
104	Carbon loss from forest degradation exceeds that from deforestation in the Brazilian Amazon. Nature Climate Change, 2021, 11, 442-448.	8.1	166
105	Variations of carbon allocation and turnover time across tropical forests. Global Ecology and Biogeography, 2021, 30, 1271-1285.	2.7	12
106	Quantifying forest change in the European Union. Nature, 2021, 592, E13-E14.	13.7	31
107	How to reconstruct aerosol-induced diffuse radiation scenario for simulating GPP in land surface models? An evaluation of reconstruction methods with ORCHIDEE_DFv1.0_DFforc. Geoscientific Model Development, 2021, 14, 2029-2039.	1.3	2
108	Global CO₂ uptake by cement from 1930 to 2019. Earth System Science Data, 2021, 13, 1791-1805.	3.7	35

#	Article	IF	Citations
109	Reply to: Disentangling biology from mathematical necessity in twentieth-century gymnosperm resilience trends. Nature Ecology and Evolution, 2021, 5, 736-737.	3.4	1
110	The contributions of individual countries and regions to the global radiative forcing. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	15
111	Wetter environment and increased grazing reduced the area burned in northern Eurasia from 2002 to 2016. Biogeosciences, 2021, 18, 2559-2572.	1.3	7
112	Microbial Activity and Root Carbon Inputs Are More Important than Soil Carbon Diffusion in Simulating Soil Carbon Profiles. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG006205.	1.3	9
113	Cost-effective implementation of the Paris Agreement using flexible greenhouse gas metrics. Science Advances, 2021, 7, .	4.7	29
114	Uncovering the Past and Future Climate Drivers of Wheat Yield Shocks in Europe With Machine Learning. Earth's Future, 2021, 9, e2020EF001815.	2.4	15
115	Spatially explicit analysis identifies significant potential for bioenergy with carbon capture and storage in China. Nature Communications, 2021, 12, 3159.	5.8	58
116	Increased CO2 emissions surpass reductions of non-CO2 emissions more under higher experimental warming in an alpine meadow. Science of the Total Environment, 2021, 769, 144559.	3.9	18
117	Global Simulation and Evaluation of Soil Organic Matter and Microbial Carbon and Nitrogen Stocks Using the Microbial Decomposition Model ORCHIMIC v2.0. Global Biogeochemical Cycles, 2021, 35, e2020GB006836.	1.9	15
118	Greening drylands despite warming consistent with carbon dioxide fertilization effect. Global Change Biology, 2021, 27, 3336-3349.	4.2	50
119	Decadal variability in land carbon sink efficiency. Carbon Balance and Management, 2021, 16, 15.	1.4	6
120	A small climate-amplifying effect of climate-carbon cycle feedback. Nature Communications, 2021, 12, 2952.	5.8	5
121	Comparing machine learning-derived global estimates of soil respiration and its components with those from terrestrial ecosystem models. Environmental Research Letters, 2021, 16, 054048.	2.2	18
122	The Key Role of Production Efficiency Changes in Livestock Methane Emission Mitigation. AGU Advances, 2021, 2, e2021AV000391.	2.3	39
123	Carbon Cycle Response to Temperature Overshoot Beyond 2Â°C: An Analysis of CMIP6 Models. Earth's Future, 2021, 9, e2020EF001967.	2.4	17
124	Unusual characteristics of the carbon cycle during the 2015âˆ’2016 El NiÃ±o. Global Change Biology, 2021, 27, 3798-3809.	4.2	6
125	The consolidated European synthesis of CH₄ and N₂O emissions for the European Union and United Kingdom: 1990â€“2017. Earth System Science Data, 2021, 13, 2307-2362.	3.7	16
126	The consolidated European synthesis of CO₂ emissions and removals for the European Union and United Kingdom: 1990â€“2018. Earth System Science Data, 2021, 13, 2363-2406.	3.7	23

#	Article	IF	Citations
127	Recent advances and future research in ecological stoichiometry. Perspectives in Plant Ecology, Evolution and Systematics, 2021, 50, 125611.	1.1	57
128	Vapor Pressure Deficit and Sunlight Explain Seasonality of Leaf Phenology and Photosynthesis Across Amazonian Evergreen Broadleaved Forest. Global Biogeochemical Cycles, 2021, 35, e2020GB006893.	1.9	31
129	A 30â€‰m terrace mapping in China using Landsat 8 imagery and digital elevation model based on the Google Earth Engine. Earth System Science Data, 2021, 13, 2437-2456.	3.7	39
130	Tradeoff of CO2 and CH4 emissions from global peatlands under water-table drawdown. Nature Climate Change, 2021, 11, 618-622.	8.1	57
131	Insights on Nitrogen and Phosphorus Coâ€Limitation in Global Croplands From Theoretical and Modeling Fertilization Experiments. Global Biogeochemical Cycles, 2021, 35, e2020GB006915.	1.9	3
132	Climate change-induced greening on the Tibetan Plateau modulated by mountainous characteristics. Environmental Research Letters, 2021, 16, 064064.	2.2	16
133	Large historical carbon emissions from cultivated northern peatlands. Science Advances, 2021, 7, .	4.7	37
134	Influences of international agricultural trade on the global phosphorus cycle and its associated issues. Global Environmental Change, 2021, 69, 102282.	3.6	16
135	Potential CO2 removal from enhanced weathering by ecosystem responses to powdered rock. Nature Geoscience, 2021, 14, 545-549.	5.4	69
136	Fire enhances forest degradation within forest edge zones in Africa. Nature Geoscience, 2021, 14, 479-483.	5.4	26
137	Bioenergy Crops for Low Warming Targets Require Half of the Present Agricultural Fertilizer Use. Environmental Science & Technology, 2021, 55, 10654-10661.	4.6	14
138	Additional carbon inputs to reach a 4 per 1000 objective in Europe: feasibility and projected impacts of climate change based on Century simulations of long-term arable experiments. Biogeosciences, 2021, 18, 3981-4004.	1.3	24
139	A mixedâ€effect model approach for assessing landâ€based mitigation in integrated assessment models: A regional perspective. Global Change Biology, 2021, 27, 4671-4685.	4.2	4
140	Recent leveling off of vegetation greenness and primary production reveals the increasing soil water limitations on the greening Earth. Science Bulletin, 2021, 66, 1462-1471.	4.3	46
141	Sensitivity to the sources of uncertainties in the modeling of atmospheric CO₂ concentration within and in the vicinity of Paris. Atmospheric Chemistry and Physics, 2021, 21, 10707-10726.	1.9	14
142	Disentangling the Impacts of Anthropogenic Aerosols on Terrestrial Carbon Cycle During 1850â€"2014. Earth's Future, 2021, 9, e2021EF002035.	2.4	11
143	Oil palm modelling in the global land surface model ORCHIDEE-MICT. Geoscientific Model Development, 2021, 14, 4573-4592.	1.3	1
144	Annual Maps of Forests in Australia from Analyses of Microwave and Optical Images with FAO Forest Definition. Journal of Remote Sensing, 2021, 2021, .	3.2	3

#	Article	IF	Citations
145	Predicting the effect of confinement on the COVID-19 spread using machine learning enriched with satellite air pollution observations. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	16
146	No historical evidence for increased vulnerability of French crop production to climatic hazards. Agricultural and Forest Meteorology, 2021, 306, 108453.	1.9	5
147	A global map of root biomass across the world's forests. Earth System Science Data, 2021, 13, 4263-4274.	3.7	19
148	Indication of paleoecological evidence on the evolution of alpine vegetation productivity and soil erosion in central China since the mid-Holocene. Science China Earth Sciences, 2021, 64, 1774-1783.	2.3	5
149	A Dataâ€Driven Global Soil Heterotrophic Respiration Dataset and the Drivers of Its Interâ€Annual Variability. Global Biogeochemical Cycles, 2021, 35, e2020GB006918.	1.9	18
150	Early Summer Soil Moisture Contribution to Western European Summer Warming. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034646.	1.2	15
151	Accelerating methane growth rate from 2010 to 2017: leading contributions from the tropics and East Asia. Atmospheric Chemistry and Physics, 2021, 21, 12631-12647.	1.9	23
152	Emerging reporting and verification needs under the Paris Agreement: How can the research community effectively contribute?. Environmental Science and Policy, 2021, 122, 116-126.	2.4	23
153	Recent Slowdown of Anthropogenic Methane Emissions in China Driven by Stabilized Coal Production. Environmental Science and Technology Letters, 2021, 8, 739-746.	3.9	25
154	The effect of global change on soil phosphatase activity. Global Change Biology, 2021, 27, 5989-6003.	4.2	59
155	Global greenhouse gas emissions from animal-based foods are twice those of plant-based foods. Nature Food, 2021, 2, 724-732.	6.2	298
156	Global hunter-gatherer population densities constrained by influence of seasonality on diet composition. Nature Ecology and Evolution, 2021, 5, 1536-1545.	3.4	21
157	Mobile atmospheric measurements and local-scale inverse estimation of the location and rates of brief CH₄ and CO₂ releases from point sources. Atmospheric Measurement Techniques, 2021, 14, 5987-6003.	1.2	6
158	Saturation of Global Terrestrial Carbon Sink Under a High Warming Scenario. Global Biogeochemical Cycles, 2021, 35, e2020GB006800.	1.9	11
159	Increasing forest fire emissions despite the decline in global burned area. Science Advances, 2021, 7, eabh2646.	4.7	71
160	An algorithm to detect non-background signals in greenhouse gas time series from European tall tower and mountain stations. Atmospheric Measurement Techniques, 2021, 14, 6119-6135.	1.2	1
161	Intergenerational inequities in exposure to climate extremes. Science, 2021, 374, 158-160.	6.0	148
162	An alternative AMSR2 vegetation optical depth for monitoring vegetation at large scales. Remote Sensing of Environment, 2021, 263, 112556.	4.6	23

#	Article	IF	Citations
163	ASCAT IB: A radar-based vegetation optical depth retrieved from the ASCAT scatterometer satellite. Remote Sensing of Environment, 2021, 264, 112587.	4.6	19
164	Additional surface-water deficit to meet global universal water accessibility by 2030. Journal of Cleaner Production, 2021, 320, 128829.	4.6	11
165	Aerodynamic resistance and Bowen ratio explain the biophysical effects of forest cover on understory air and soil temperatures at the global scale. Agricultural and Forest Meteorology, 2021, 308-309, 108615.	1.9	9
166	A comprehensive framework for seasonal controls of leaf abscission and productivity in evergreen broadleaved tropical and subtropical forests. Innovation(China), 2021, 2, 100154.	5.2	19
167	The Potential of Low-Cost Tin-Oxide Sensors Combined with Machine Learning for Estimating Atmospheric CH4 Variations around Background Concentration. Atmosphere, 2021, 12, 107.	1.0	5
168	Atmospheric dynamic constraints on Tibetan Plateau freshwater under Paris climate targets. Nature Climate Change, 2021, 11, 219-225.	8.1	87
169	First Retrievals of ASCAT IB VOD (Vegetation Optical Depth) at Global Scale. , 2021, , .		0
170	Alternate Inrae-Bordeaux VOD Indices from SMOS, AMSR2 and ASCAT: Overview of Recent Developments. , 2021, , .		1
171	Global Scale IB AMSR2 Vegetation Optical Depth at X-Band. , 2021, , .		0
172	Longâ€term (64Âyears) annual burning lessened soil organic carbon and nitrogen content in a humid subtropical grassland. Global Change Biology, 2021, 27, 6436-6453.	4.2	9
173	Vulnerability of European ecosystems to two compound dry and hot summers in 2018 and 2019. Earth System Dynamics, 2021, 12, 1015-1035.	2.7	49
174	Wetlands of North Africa During the Midâ€Holocene Were at Least Five Times the Area Today. Geophysical Research Letters, 2021, 48, e2021GL094194.	1.5	7
175	Global mapping of crop-specific emission factors highlights hotspots of nitrous oxide mitigation. Nature Food, 2021, 2, 886-893.	6.2	68
176	A consistent record of vegetation optical depth retrieved from the AMSR-E and AMSR2 X-band observations. International Journal of Applied Earth Observation and Geoinformation, 2021, 105, 102609.	1.4	9
177	Analysis of the temporal variability of CO2, CH4 and CO concentrations at Lamto, West Africa. Tellus, Series B: Chemical and Physical Meteorology, 2021, 73, 1-24.	0.8	4
178	Regional impacts of COVID-19 on carbon dioxide detected worldwide from space. Science Advances, 2021, 7, eabf9415.	4.7	33
179	Siberian 2020 heatwave increased spring CO₂ uptake but not annual CO₂ uptake. Environmental Research Letters, 2021, 16, 124030.	2.2	7
180	Strong direct and indirect influences of climate change on water yield confirmed by the Budyko framework. Geography and Sustainability, 2021, 2, 281-287.	1.9	3

#	Article	IF	Citations
181	Magnitude and Uncertainty of Nitrous Oxide Emissions From North America Based on Bottomâ€Up and Topâ€Down Approaches: Informing Future Research and National Inventories. Geophysical Research Letters, 2021, 48, e2021GL095264.	1.5	7
182	Reply to Comment by Rigolot on â€œNarratives Behind Livestock Methane Mitigation Studies Matterâ€ AGU Advances, 2021, 2, e2021AV000549.	2.3	2
183	Fire Regime Impacts on Postfire Diurnal Land Surface Temperature Change Over North American Boreal Forest. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035589.	1.2	3
184	Aerosolâ€“light interactions reduce the carbon budget imbalance. Environmental Research Letters, 2021, 16, 124072.	2.2	10
185	Global cooling induced by biophysical effects of bioenergy crop cultivation. Nature Communications, 2021, 12, 7255.	5.8	19
186	Human activities aggravate nitrogen-deposition pollution to inland water over China. National Science Review, 2020, 7, 430-440.	4.6	80
187	Local and teleconnected temperature effects of afforestation and vegetation greening in China. National Science Review, 2020, 7, 897-912.	4.6	60
188	Global trends in water and sediment fluxes of the worldâ€™s large rivers. Science Bulletin, 2020, 65, 62-69.	4.3	156
189	Phenology acts as a primary control of urban vegetation cooling and warming: A synthetic analysis of global site observations. Agricultural and Forest Meteorology, 2020, 280, 107765.	1.9	18
190	Global vegetation biomass production efficiency constrained by models and observations. Global Change Biology, 2020, 26, 1474-1484.	4.2	15
191	Data-driven estimates of global nitrous oxide emissions from croplands. National Science Review, 2020, 7, 441-452.	4.6	95
192	Interannual variation of terrestrial carbon cycle: Issues and perspectives. Global Change Biology, 2020, 26, 300-318.	4.2	214
193	Anthropogenic methane plume detection from point sources in the Paris megacity area and characterization of their Î´13C signature. Atmospheric Environment, 2020, 222, 117055.	1.9	17
194	Forest management in southern China generates short term extensive carbon sequestration. Nature Communications, 2020, 11, 129.	5.8	259
195	Anthropogenic global shifts in biospheric N and P concentrations and ratios and their impacts on biodiversity, ecosystem productivity, food security, and human health. Global Change Biology, 2020, 26, 1962-1985.	4.2	138
196	Summer soil drying exacerbated by earlier spring greening of northern vegetation. Science Advances, 2020, 6, eaax0255.	4.7	258
197	State of the science in reconciling topâ€down and bottomâ€up approaches for terrestrial CO₂ budget. Global Change Biology, 2020, 26, 1068-1084.	4.2	43
198	Missed atmospheric organic phosphorus emitted by terrestrial plants, part 2: Experiment of volatile phosphorus. Environmental Pollution, 2020, 258, 113728.	3.7	10

#	Article	IF	Citations
199	Novel Representation of Leaf Phenology Improves Simulation of Amazonian Evergreen Forest Photosynthesis in a Land Surface Model. Journal of Advances in Modeling Earth Systems, 2020, 12, e2018MS001565.	1.3	36
200	Characteristics, drivers and feedbacks of global greening. Nature Reviews Earth & Environment, 2020, 1, 14-27.	12.2	889
201	Whole soil acidification and base cation reduction across subtropical China. Geoderma, 2020, 361, 114107.	2.3	50
202	Annual ecosystem respiration is resistant to changes in freezeâ€“thaw periods in semiâ€arid permafrost. Global Change Biology, 2020, 26, 2630-2641.	4.2	18
203	A comprehensive quantification of global nitrous oxide sources and sinks. Nature, 2020, 586, 248-256.	13.7	814
204	Forest production efficiency increases with growth temperature. Nature Communications, 2020, 11, 5322.	5.8	57
205	Near-real-time monitoring of global CO2 emissions reveals the effects of the COVID-19 pandemic. Nature Communications, 2020, 11, 5172.	5.8	420
206	Reducing Uncertainties of Future Global Soil Carbon Responses to Climate and Land Use Change With Emergent Constraints. Global Biogeochemical Cycles, 2020, 34, e2020GB006589.	1.9	4
207	Overestimation of the effect of climatic warming on spring phenology due to misrepresentation of chilling. Nature Communications, 2020, 11, 4945.	5.8	67
208	Short-lived climate forcers have long-term climate impacts via the carbonâ€“climate feedback. Nature Climate Change, 2020, 10, 851-855.	8.1	31
209	Projecting Exposure to Extreme Climate Impact Events Across Six Event Categories and Three Spatial Scales. Earth's Future, 2020, 8, e2020EF001616.	2.4	69
210	Amazon rainforest photosynthesis increases in response to atmospheric dryness. Science Advances, 2020, 6, .	4.7	98
211	Daily CO2 Emission Reduction Indicates the Control of Activities to Contain COVID-19 in China. Innovation(China), 2020, 1, 100062.	5.2	25
212	Could Global Intensification of Nitrogen Fertilisation Increase Immunogenic Proteins and Favour the Spread of Coeliac Pathology?. Foods, 2020, 9, 1602.	1.9	9
213	How Simulations of the Land Carbon Sink Are Biased by Ignoring Fluvial Carbon Transfers: A Case Study for the Amazon Basin. One Earth, 2020, 3, 226-236.	3.6	26
214	Satellite-based estimates of decline and rebound in Chinaâ€™s CO ₂ emissions during COVID-19 pandemic. Science Advances, 2020, 6, .	4.7	136
215	Carbon Monitor, a near-real-time daily dataset of global CO2 emission from fossil fuel and cement production. Scientific Data, 2020, 7, 392.	2.4	115
216	Global socioeconomic exposure of heat extremes under climate change. Journal of Cleaner Production, 2020, 277, 123275.	4.6	29

#	Article	IF	Citations
217	The COVID-19 lockdowns: a window into the Earth System. Nature Reviews Earth & Environment, 2020, 1, 470-481.	12.2	153
218	Impact of extreme weather conditions on European crop production in 2018. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190510.	1.8	138
219	A historical, geographical and ecological perspective on the 2018 European summer drought. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190505.	1.8	89
220	Country-Level Relationships of the Human Intake of N and P, Animal and Vegetable Food, and Alcoholic Beverages with Cancer and Life Expectancy. International Journal of Environmental Research and Public Health, 2020, 17, 7240.	1.2	7
221	The potential of a constellation of low earth orbit satellite imagers to monitor worldwide fossil fuel CO2 emissions from large cities and point sources. Carbon Balance and Management, 2020, 15, 18.	1.4	9
222	Impacts of extreme summers on European ecosystems: a comparative analysis of 2003, 2010 and 2018. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190507.	1.8	64
223	Carbon benefits from Forest Transitions promoting biomass expansions and thickening. Global Change Biology, 2020, 26, 5365-5370.	4.2	16
224	Asymmetric responses of ecosystem productivity to rainfall anomalies vary inversely with mean annual rainfall over the conterminous United States. Global Change Biology, 2020, 26, 6959-6973.	4.2	31
225	Global Socioeconomic Risk of Precipitation Extremes Under Climate Change. Earth's Future, 2020, 8, e2019EF001331.	2.4	34
226	The fingerprint of the summer 2018 drought in Europe on ground-based atmospheric CO₂measurements. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190513.	1.8	31
227	Sensitivity of gross primary productivity to climatic drivers during the summer drought of 2018 in Europe. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190747.	1.8	71
228	Moving toward Net-Zero Emissions Requires New Alliances for Carbon Dioxide Removal. One Earth, 2020, 3, 145-149.	3.6	61
229	Recent global decline of CO ₂ fertilization effects on vegetation photosynthesis. Science, 2020, 370, 1295-1300.	6.0	317
230	Local Anomalies in the Columnâ€Averaged Dry Air Mole Fractions of Carbon Dioxide Across the Globe During the First Months of the Coronavirus Recession. Geophysical Research Letters, 2020, 47, e2020GL090244.	1.5	31
231	Simulating Erosionâ€Induced Soil and Carbon Delivery From Uplands to Rivers in a Global Land Surface Model. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002121.	1.3	10
232	Global Phosphorus Losses from Croplands under Future Precipitation Scenarios. Environmental Science & Technology, 2020, 54, 14761-14771.	4.6	20
233	High-spatiotemporal-resolution mapping of global urban change from 1985 to 2015. Nature Sustainability, 2020, 3, 564-570.	11.5	391
234	Comparison of forest aboveâ€ground biomass from dynamic global vegetation models with spatially explicit remotely sensed observationâ€based estimates. Global Change Biology, 2020, 26, 3997-4012.	4.2	25

#	Article	IF	Citations
235	The GGCMI Phase 2 experiment: global gridded crop model simulations under uniform changes in CO₂, temperature, water, and nitrogen levels (protocol) Tj ETQq1 1 0.784314 rg BT /Overlo	1.4	38
236	Organizing principles for vegetation dynamics. Nature Plants, 2020, 6, 444-453.	4.7	95
237	Causes of slowingâ€down seasonal CO₂ amplitude at Mauna Loa. Global Change Biology, 2020, 26, 4462-4477.	4.2	14
238	Assessing satellite-derived fire patches with functional diversity trait methods. Remote Sensing of Environment, 2020, 247, 111897.	4.6	4
239	Direct and seasonal legacy effects of the 2018 heat wave and drought on European ecosystem productivity. Science Advances, 2020, 6, eaba2724.	4.7	229
240	Feedbacks of soil properties on vegetation during the Green Sahara period. Quaternary Science Reviews, 2020, 240, 106389.	1.4	11
241	Temporal trade-off between gymnosperm resistance and resilience increases forest sensitivity to extreme drought. Nature Ecology and Evolution, 2020, 4, 1075-1083.	3.4	134
242	Accelerated terrestrial ecosystem carbon turnover and its drivers. Global Change Biology, 2020, 26, 5052-5062.	4.2	42
243	Contribution of land use to the interannual variability of the land carbon cycle. Nature Communications, 2020, 11, 3170.	5.8	57
244	GRACE satellite-based drought index indicating increased impact of drought over major basins in China during 2002â€"2017. Agricultural and Forest Meteorology, 2020, 291, 108057.	1.9	51
245	Can lightâ€saturated photosynthesis in lowland tropical forests be estimated by one light level?. Biotropica, 2020, 52, 1183-1193.	0.8	2
246	Climate-driven risks to the climate mitigation potential of forests. Science, 2020, 368, .	6.0	346
247	Spatio-temporal variations and uncertainty in land surface modelling for high latitudes: univariate response analysis. Biogeosciences, 2020, 17, 1821-1844.	1.3	3
248	Historical and future changes in global flood magnitude â€" evidence from a modelâ€"observation investigation. Hydrology and Earth System Sciences, 2020, 24, 1543-1564.	1.9	40
249	ORCHIDEE MICT-LEAK (r5459), a global model for the production, transport, and transformation of dissolved organic carbon from Arctic permafrost regions â€" Part 2: Model evaluation over the Lena River basin. Geoscientific Model Development, 2020, 13, 507-520.	1.3	12
250	China's Food Supply Sources Under Trade Conflict With the United States and Limited Domestic Land and Water Resources. Earth's Future, 2020, 8, e2020EF001482.	2.4	13
251	Increased control of vegetation on global terrestrial energy fluxes. Nature Climate Change, 2020, 10, 356-362.	8.1	152
252	Coping with branch excision when measuring leaf net photosynthetic rates in a lowland tropical forest. Biotropica, 2020, 52, 608-615.	0.8	17

#	Article	IF	Citations
253	Carbon and Phosphorus Allocation in Annual Plants: An Optimal Functioning Approach. Frontiers in Plant Science, 2020, 11, 149.	1.7	12
254	Warming-induced unprecedented high-elevation forest growth over the monsoonal Tibetan Plateau. Environmental Research Letters, 2020, 15, 054011.	2.2	23
255	Climate Extreme Versus Carbon Extreme: Responses of Terrestrial Carbon Fluxes to Temperature and Precipitation. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005252.	1.3	29
256	Nitrogen addition increased CO ₂ uptake more than non-CO ₂ greenhouse gases emissions in a Moso bamboo forest. Science Advances, 2020, 6, eaaw5790.	4.7	60
257	Deceleration of Chinaâ€™s human water use and its key drivers. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7702-7711.	3.3	155
258	Increasing atmospheric CO2 concentrations correlate with declining nutritional status of European forests. Communications Biology, 2020, 3, 125.	2.0	58
259	The role of northern peatlands in the global carbon cycle for the 21st century. Global Ecology and Biogeography, 2020, 29, 956-973.	2.7	43
260	Emergent constraint on crop yield response to warmer temperature from field experiments. Nature Sustainability, 2020, 3, 908-916.	11.5	96
261	Soil thawing regulates the spring growth onset in tundra and alpine biomes. Science of the Total Environment, 2020, 742, 140637.	3.9	16
262	Rainfall manipulation experiments as simulated by terrestrial biosphere models: Where do we stand?. Global Change Biology, 2020, 26, 3336-3355.	4.2	50
263	Improvement of the Irrigation Scheme in the ORCHIDEE Land Surface Model and Impacts of Irrigation on Regional Water Budgets Over China. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001770.	1.3	15
264	Toward an Operational Anthropogenic CO2 Emissions Monitoring and Verification Support Capacity. Bulletin of the American Meteorological Society, 2020, 101, E1439-E1451.	1.7	63
265	Biofuel burning and human respiration bias on satellite estimates of fossil fuel CO₂ emissions. Environmental Research Letters, 2020, 15, 074036.	2.2	22
266	A top-down approach of sources and non-photosynthetic sinks of carbonyl sulfide from atmospheric measurements over multiple years in the Paris region (France). PLoS ONE, 2020, 15, e0228419.	1.1	10
267	The shift of phosphorus transfers in global fisheries and aquaculture. Nature Communications, 2020, 11, 355.	5.8	33
268	Recent divergence in the contributions of tropical and boreal forests to the terrestrial carbon sink. Nature Ecology and Evolution, 2020, 4, 202-209.	3.4	93
269	Microbial dynamics and soil physicochemical properties explain largeâ€scale variations in soil organic carbon. Global Change Biology, 2020, 26, 2668-2685.	4.2	56
270	Tropical forests did not recover from the strong 2015â€"2016 El NiÃ±o event. Science Advances, 2020, 6, eaay4603.	4.7	127

#	Article	IF	Citations
271	Retrospect driving forces and forecasting reduction potentials of energy-related industrial carbon emissions from Chinaâ€™s manufacturing at city level. Environmental Research Letters, 2020, 15, 074020.	2.2	6
272	Spatiotemporal dynamics of ecosystem fires and biomass burning-induced carbon emissions in China over the past two decades. Geography and Sustainability, 2020, 1, 47-58.	1.9	14
273	Vegetation and species impacts on soil organic carbon sequestration following ecological restoration over the Loess Plateau, China. Geoderma, 2020, 371, 114389.	2.3	27
274	The global cropland-sparing potential of high-yield farming. Nature Sustainability, 2020, 3, 281-289.	11.5	121
275	CE-DYNAM (v1): a spatially explicit process-based carbon erosion scheme for use in Earth system models. Geoscientific Model Development, 2020, 13, 1201-1222.	1.3	11
276	Sources of Uncertainty in Regional and Global Terrestrial CO₂ Exchange Estimates. Global Biogeochemical Cycles, 2020, 34, e2019GB006393.	1.9	59
277	Pronounced and unavoidable impacts of low-end global warming on northern high-latitude land ecosystems. Environmental Research Letters, 2020, 15, 044006.	2.2	25
278	Time-varying impact of climate on maize and wheat yields in France since 1900. Environmental Research Letters, 2020, 15, 094039.	2.2	14
279	Consistency of Satellite Climate Data Records for Earth System Monitoring. Bulletin of the American Meteorological Society, 2020, 101, E1948-E1971.	1.7	21
280	The regional European atmospheric transport inversion comparison, EUROCOM: first results on European-wide terrestrial carbon fluxes for the period 2006â€“2015. Atmospheric Chemistry and Physics, 2020, 20, 12063-12091.	1.9	31
281	Observing carbon dioxide emissions over China's cities and industrial areas with the Orbiting Carbon Observatory-2. Atmospheric Chemistry and Physics, 2020, 20, 8501-8510.	1.9	64
282	Historical CO₂ emissions from land use and land cover change and their uncertainty. Biogeosciences, 2020, 17, 4075-4101.	1.3	112
283	The Global Methane Budget 2000â€“2017. Earth System Science Data, 2020, 12, 1561-1623.	3.7	1,199
284	Global Carbon Budget 2020. Earth System Science Data, 2020, 12, 3269-3340.	3.7	1,477
285	Mapping the yields of lignocellulosic bioenergy crops from observations at the global scale. Earth System Science Data, 2020, 12, 789-804.	3.7	26
286	Annual oil palm plantation maps in Malaysia and Indonesia from 2001 to 2016. Earth System Science Data, 2020, 12, 847-867.	3.7	50
287	European anthropogenic AFOLU greenhouse gas emissions: a review and benchmark data. Earth System Science Data, 2020, 12, 961-1001.	3.7	31
288	Modeling the impacts of diffuse light fraction on photosynthesis in ORCHIDEE (v5453) land surface model. Geoscientific Model Development, 2020, 13, 5401-5423.	1.3	23

#	Article	IF	Citations
289	PMIF v1.0: assessing the potential of satellite observations to constrain CO₂ emissions from large cities and point sources over the globe using synthetic data. Geoscientific Model Development, 2020, 13, 5813-5831.	1.3	16
290	Widespread decline in terrestrial water storage and its link to teleconnections across Asia and eastern Europe. Hydrology and Earth System Sciences, 2020, 24, 3663-3676.	1.9	19
291	Vegetation Optical Depth Retrieval from AMSR-E/AMSR2 Observations Using L-MEB Inversion. , 2020, , .		0
292	A meta-analysis of 1,119 manipulative experiments on terrestrial carbon-cycling responses to global change. Nature Ecology and Evolution, 2019, 3, 1309-1320.	3.4	304
293	Increased atmospheric vapor pressure deficit reduces global vegetation growth. Science Advances, 2019, 5, eaax1396.	4.7	755
294	Greenhouse Gas Concentration and Volcanic Eruptions Controlled the Variability of Terrestrial Carbon Uptake Over the Last Millennium. Journal of Advances in Modeling Earth Systems, 2019, 11, 1715-1734.	1.3	3
295	Satellite-observed pantropical carbon dynamics. Nature Plants, 2019, 5, 944-951.	4.7	141
296	Controls of soil organic matter on soil thermal dynamics in the northern high latitudes. Nature Communications, 2019, 10, 3172.	5.8	54
297	Modelling northern peatland area and carbon dynamics since the Holocene with the ORCHIDEE-PEAT land surface model (SVN r5488). Geoscientific Model Development, 2019, 12, 2961-2982.	1.3	18
298	Carbon stocks in central African forests enhanced by elephant disturbance. Nature Geoscience, 2019, 12, 725-729.	5.4	62
299	Benchmark estimates for aboveground litterfall data derived from ecosystem models. Environmental Research Letters, 2019, 14, 084020.	2.2	19
300	Response of vegetation cover to CO2 and climate changes between Last Glacial Maximum and pre-industrial period in a dynamic global vegetation model. Quaternary Science Reviews, 2019, 218, 293-305.	1.4	17
301	Cryptic phenology in plants: Case studies, implications, and recommendations. Global Change Biology, 2019, 25, 3591-3608.	4.2	26
302	Revisiting enteric methane emissions from domestic ruminants and their Î´13CCH4 source signature. Nature Communications, 2019, 10, 3420.	5.8	75
303	Covariations between plant functional traits emerge from constraining parameterization of a terrestrial biosphere model. Global Ecology and Biogeography, 2019, 28, 1351-1365.	2.7	22
304	A global dataset of CO2 emissions and ancillary data related to emissions for 343 cities. Scientific Data, 2019, 6, 180280.	2.4	65
305	Contrasting effects of CO₂ fertilization, land-use change and warming on seasonal amplitude of Northern Hemisphere CO₂ exchange. Atmospheric Chemistry and Physics, 2019, 19, 12361-12375.	1.9	30
306	Modeling the Vegetation Dynamics of Northern Shrubs and Mosses in the ORCHIDEE Land Surface Model. Journal of Advances in Modeling Earth Systems, 2019, 11, 2020-2035.	1.3	18

#	Article	IF	Citations
307	Parameterization-induced uncertainties and impacts of crop management harmonization in a global gridded crop model ensemble. PLoS ONE, 2019, 14, e0221862.	1.1	42
308	ORCHIDEE MICT-LEAK (r5459), a global model for the production, transport, and transformation of dissolved organic carbon from Arctic permafrost regions â€“ Part 1: Rationale, model description, and simulation protocol. Geoscientific Model Development, 2019, 12, 3503-3521.	1.3	12
309	Field-experiment constraints on the enhancement of the terrestrial carbon sink by CO2 fertilization. Nature Geoscience, 2019, 12, 809-814.	5.4	58
310	Quantifying the biophysical effects of forests on local air temperature using a novel three-layered land surface energy balance model. Environment International, 2019, 132, 105080.	4.8	19
311	Vegetation structural change since 1981 significantly enhanced the terrestrial carbon sink. Nature Communications, 2019, 10, 4259.	5.8	170
312	Varying relationships between fire radiative power and fire size at a global scale. Biogeosciences, 2019, 16, 275-288.	1.3	40
313	Global Nitrous Oxide Emissions From Pasturelands and Rangelands: Magnitude, Spatiotemporal Patterns, and Attribution. Global Biogeochemical Cycles, 2019, 33, 200-222.	1.9	47
314	Negative extreme events in gross primary productivity and their drivers in China during the past three decades. Agricultural and Forest Meteorology, 2019, 275, 47-58.	1.9	40
315	Global Patterns in Net Primary Production Allocation Regulated by Environmental Conditions and Forest Stand Age: A Modelâ€Data Comparison. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 2039-2059.	1.3	30
316	Weakened growth of croplandâ€N₂O emissions in China associated with nationwide policy interventions. Global Change Biology, 2019, 25, 3706-3719.	4.2	46
317	Characterization of a commercial lower-cost medium-precision non-dispersive infrared sensor for atmospheric CO₂ monitoring in urban areas. Atmospheric Measurement Techniques, 2019, 12, 2665-2677.	1.2	16
318	The Global Gridded Crop Model Intercomparison phase 1 simulation dataset. Scientific Data, 2019, 6, 50.	2.4	57
319	The asymmetric impact of abundant preceding rainfall on heat stress in low latitudes. Environmental Research Letters, 2019, 14, 044010.	2.2	11
320	Recent Warming Has Resulted in Smaller Gains in Net Carbon Uptake in Northern High Latitudes. Journal of Climate, 2019, 32, 5849-5863.	1.2	6
321	Changes in productivity and carbon storage of grasslands in China under future global warming scenarios of 1.5Â°C and 2Â°C. Journal of Plant Ecology, 2019, 12, 804-814.	1.2	18
322	The bioelements, the elementome, and the biogeochemical niche. Ecology, 2019, 100, e02652.	1.5	139
323	Aquatic carbon fluxes dampen the overall variation of net ecosystem productivity in the Amazon basin: An analysis of the interannual variability in the boundless carbon cycle. Global Change Biology, 2019, 25, 2094-2111.	4.2	34
324	Managing nitrogen to restore water quality in China. Nature, 2019, 567, 516-520.	13.7	667

#	Article	IF	Citations
325	Air temperature optima of vegetation productivity across global biomes. Nature Ecology and Evolution, 2019, 3, 772-779.	3.4	316
326	XCO₂ in an emission hot-spot region: the COCCON Paris campaign 2015. Atmospheric Chemistry and Physics, 2019, 19, 3271-3285.	1.9	35
327	Climate and litter C/N ratio constrain soil organic carbon accumulation. National Science Review, 2019, 6, 746-757.	4.6	87
328	Five decades of northern land carbon uptake revealed by the interhemispheric CO2 gradient. Nature, 2019, 568, 221-225.	13.7	124
329	Summer Temperature over the Tibetan Plateau Modulated by Atlantic Multidecadal Variability. Journal of Climate, 2019, 32, 4055-4067.	1.2	22
330	Increased Global Land Carbon Sink Due to Aerosolâ€Induced Cooling. Global Biogeochemical Cycles, 2019, 33, 439-457.	1.9	27
331	China and India lead in greening of the world through land-use management. Nature Sustainability, 2019, 2, 122-129.	11.5	1,636
332	State-of-the-art global models underestimate impacts from climate extremes. Nature Communications, 2019, 10, 1005.	5.8	168
333	Analysis of temporal and spatial variability of atmospheric CO₂ concentration within Paris from the GreenLITEâ„¢ laser imaging experiment. Atmospheric Chemistry and Physics, 2019, 19, 13809-13825.	1.9	17
334	A reversal in global terrestrial stilling and its implications for wind energy production. Nature Climate Change, 2019, 9, 979-985.	8.1	246
335	Spatial variance of spring phenology in temperate deciduous forests is constrained by background climatic conditions. Nature Communications, 2019, 10, 5388.	5.8	66
336	Global trends in carbon sinks and their relationships with CO2 and temperature. Nature Climate Change, 2019, 9, 73-79.	8.1	163
337	Strong but Intermittent Spatial Covariations in Tropical Land Temperature. Geophysical Research Letters, 2019, 46, 356-364.	1.5	9
338	Elevated CO₂ does not stimulate carbon sink in a semi-arid grassland. Ecology Letters, 2019, 22, 458-468.	3.0	34
339	Representing explicit budburst and senescence processes for evergreen conifers in global models. Agricultural and Forest Meteorology, 2019, 266-267, 97-108.	1.9	9
340	Global soil nitrous oxide emissions since the preindustrial era estimated by an ensemble of terrestrial biosphere models: Magnitude, attribution, and uncertainty. Global Change Biology, 2019, 25, 640-659.	4.2	214
341	Enhanced growth after extreme wetness compensates for post-drought carbon loss in dry forests. Nature Communications, 2019, 10, 195.	5.8	59
342	The sensitivity of the forest carbon budget shifts across processes along with stand development and climate change. Ecological Applications, 2019, 29, e01837.	1.8	39

#	Article	IF	Citations
343	Uneven winter snow influence on tree growth across temperate China. Global Change Biology, 2019, 25, 144-154.	4.2	39
344	Matching policy and science: Rationale for the â€˜4 per 1000 - soils for food security and climateâ€™ initiative. Soil and Tillage Research, 2019, 188, 3-15.	2.6	208
345	Spatial Pattern and Environmental Drivers of Acid Phosphatase Activity in Europe. Frontiers in Big Data, 2019, 2, 51.	1.8	11
346	Global atmospheric carbon monoxide budget 2000â€“2017 inferred from multi-species atmospheric inversions. Earth System Science Data, 2019, 11, 1411-1436.	3.7	96
347	Global Carbon Budget 2019. Earth System Science Data, 2019, 11, 1783-1838.	3.7	1,159
348	A global map of emission clumps for future monitoring of fossil fuel CO₂ emissions from space. Earth System Science Data, 2019, 11, 687-703.	3.7	19
349	The large mean body size of mammalian herbivores explains the productivity paradox during the Last Glacial Maximum. Nature Ecology and Evolution, 2018, 2, 640-649.	3.4	37
350	Uncertainty in projected climate change arising from uncertain fossil-fuel emission factors. Environmental Research Letters, 2018, 13, 044017.	2.2	19
351	Inventory of methane emissions from livestock in China from 1980 to 2013. Atmospheric Environment, 2018, 184, 69-76.	1.9	27
352	Changes in the Response of the Northern Hemisphere Carbon Uptake to Temperature Over the Last Three Decades. Geophysical Research Letters, 2018, 45, 4371-4380.	1.5	21
353	Infrastructure Shapes Differences in the Carbon Intensities of Chinese Cities. Environmental Science & Technology, 2018, 52, 6032-6041.	4.6	30
354	Rapid decline in carbon monoxide emissions and export from East Asia between years 2005 and 2016. Environmental Research Letters, 2018, 13, 044007.	2.2	95
355	Assessing the Impacts of Extreme Agricultural Droughts in China Under Climate and Socioeconomic Changes. Earth's Future, 2018, 6, 689-703.	2.4	72
356	Dominant regions and drivers of the variability of the global land carbon sink across timescales. Global Change Biology, 2018, 24, 3954-3968.	4.2	30
357	Evaluating the Interplay Between Biophysical Processes and Leaf Area Changes in Land Surface Models. Journal of Advances in Modeling Earth Systems, 2018, 10, 1102-1126.	1.3	22
358	Satellite passive microwaves reveal recent climate-induced carbon losses in African drylands. Nature Ecology and Evolution, 2018, 2, 827-835.	3.4	160
359	Large uncertainty in carbon uptake potential of landâ€based climateâ€change mitigation efforts. Global Change Biology, 2018, 24, 3025-3038.	4.2	56
360	Missing pieces to modeling the Arctic-Boreal puzzle. Environmental Research Letters, 2018, 13, 020202.	2.2	61

#	Article	IF	Citations
361	Extension of the growing season increases vegetation exposure to frost. Nature Communications, 2018, 9, 426.	5.8	190
362	The Accelerating Land Carbon Sink of the 2000s May Not Be Driven Predominantly by the Warming Hiatus. Geophysical Research Letters, 2018, 45, 1402-1409.	1.5	13
363	Impact of priming on global soil carbon stocks. Global Change Biology, 2018, 24, 1873-1883.	4.2	134
364	The Global N2O Model Intercomparison Project. Bulletin of the American Meteorological Society, 2018, 99, 1231-1251.	1.7	123
365	Impact of Earth Greening on the Terrestrial Water Cycle. Journal of Climate, 2018, 31, 2633-2650.	1.2	142
366	Recent Changes in Global Photosynthesis and Terrestrial Ecosystem Respiration Constrained From Multiple Observations. Geophysical Research Letters, 2018, 45, 1058-1068.	1.5	19
367	Quantifying the Limitation to World Cereal Production Due To Soil Phosphorus Status. Global Biogeochemical Cycles, 2018, 32, 143-157.	1.9	36
368	How to spend a dwindling greenhouse gas budget. Nature Climate Change, 2018, 8, 7-10.	8.1	119
369	Contrasting responses of grassland water and carbon exchanges to climate change between Tibetan Plateau and Inner Mongolia. Agricultural and Forest Meteorology, 2018, 249, 163-175.	1.9	62
370	Potential of European ¹⁴CO₂ observation network to estimate the fossil fuel CO₂ emissions via atmospheric inversions. Atmospheric Chemistry and Physics, 2018, 18, 4229-4250.	1.9	17
371	Causes and implications of the unforeseen 2016 extreme yield loss in the breadbasket of France. Nature Communications, 2018, 9, 1627.	5.8	116
372	Diurnal, synoptic and seasonal variability of atmospheric CO₂ in the Paris megacity area. Atmospheric Chemistry and Physics, 2018, 18, 3335-3362.	1.9	40
373	A probabilistic method for streamflow projection and associated uncertainty analysis in a data sparse alpine region. Global and Planetary Change, 2018, 165, 100-113.	1.6	26
374	Dependence of the evolution of carbon dynamics in the northern permafrost region on the trajectory of climate change. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3882-3887.	3.3	296
375	Disentangling competitive vs. climatic drivers of tropical forest mortality. Journal of Ecology, 2018, 106, 1165-1179.	1.9	33
376	Differentiating drought legacy effects on vegetation growth over the temperate Northern Hemisphere. Global Change Biology, 2018, 24, 504-516.	4.2	233
377	Organic phosphorus in the terrestrial environment: a perspective on the state of the art and future priorities. Plant and Soil, 2018, 427, 191-208.	1.8	145
378	On the causes of trends in the seasonal amplitude of atmospheric <scp>CO</scp>₂. Global Change Biology, 2018, 24, 608-616.	4.2	48

#	Article	IF	Citations
379	Cautious Optimism and Incremental Goals Toward Stabilizing Atmospheric CO 2. Earth's Future, 2018, 6, 1632-1637.	2.4	6
380	Modeling the effects of litter stoichiometry and soil mineral N availability on soil organic matter formation using CENTURY-CUE (v1.0). Geoscientific Model Development, 2018, 11, 4779-4796.	1.3	27
381	ORCHIMIC (v1.0), a microbe-mediated model for soil organic matter decomposition. Geoscientific Model Development, 2018, 11, 2111-2138.	1.3	39
382	Analysis of slight precipitation in China during the past decades and its relationship with advanced very high radiometric resolution normalized difference vegetation index. International Journal of Climatology, 2018, 38, 5563-5575.	1.5	2
383	A generic pixel-to-point comparison for simulated large-scale ecosystem properties and ground-based observations: an example from the Amazon region. Geoscientific Model Development, 2018, 11, 5203-5215.	1.3	6
384	ORCHIDEE-MICT-BIOENERGY: an attempt to represent the production of lignocellulosic crops for bioenergy in a global vegetation model. Geoscientific Model Development, 2018, 11, 2249-2272.	1.3	18
385	Evaluation of ORCHIDEE-MICT-simulated soil moisture over China and impacts of different atmospheric forcing data. Hydrology and Earth System Sciences, 2018, 22, 5463-5484.	1.9	13
386	Achieving High Crop Yields with Low Nitrogen Emissions in Global Agricultural Input Intensification. Environmental Science & Technology, 2018, 52, 13782-13791.	4.6	19
387	Yield trends, variability and stagnation analysis of major crops in France over more than a century. Scientific Reports, 2018, 8, 16865.	1.6	77
388	Contrasting responses of autumn-leaf senescence to daytime and night-time warming. Nature Climate Change, 2018, 8, 1092-1096.	8.1	145
389	Contributions of Climate Change, CO2, Land-Use Change, and Human Activities to Changes in River Flow across 10 Chinese Basins. Journal of Hydrometeorology, 2018, 19, 1899-1914.	0.7	24
390	SMOS-IC Vegetation Optical Depth Index in Monitoring Aboveground Carbon Changes in the Tropical Continents During 2010â€"2016. , 2018, , .		2
391	Contrasting streamflow regimes induced by melting glaciers across the Tien Shan â€" Pamir â€" North Karakoram. Scientific Reports, 2018, 8, 16470.	1.6	54
392	Emerging negative impact of warming on summer carbon uptake in northern ecosystems. Nature Communications, 2018, 9, 5391.	5.8	31
393	GOLUM-CNP v1.0: a data-driven modeling of carbon, nitrogen and phosphorus cycles in major terrestrial biomes. Geoscientific Model Development, 2018, 11, 3903-3928.	1.3	32
394	The carbon sequestration potential of China's grasslands. Ecosphere, 2018, 9, e02452.	1.0	22
395	The impact of future climate change and potential adaptation methods on Maize yields in West Africa. Climatic Change, 2018, 151, 205-217.	1.7	18
396	Impact of the 2015/2016 El NiÃ±o on the terrestrial carbon cycle constrained by bottom-up and top-down approaches. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170304.	1.8	63

#	Article	IF	Citations
397	Non-uniform seasonal warming regulates vegetation greening and atmospheric CO ₂ amplification over northern lands. Environmental Research Letters, 2018, 13, 124008.	2.2	11
398	Global terrestrial stilling: does Earthâ€™s greening play a role?. Environmental Research Letters, 2018, 13, 124013.	2.2	33
399	Implementing northern peatlands in a global land surface model: description and evaluation in the ORCHIDEE high-latitude version model (ORC-HL-PEAT). Geoscientific Model Development, 2018, 11, 3279-3297.	1.3	19
400	Estimation of black carbon emissions from Siberian fires using satellite observations of absorption and extinction optical depths. Atmospheric Chemistry and Physics, 2018, 18, 14889-14924.	1.9	29
401	On the Role of the Flaming to Smoldering Transition in the Seasonal Cycle of African Fire Emissions. Geophysical Research Letters, 2018, 45, 11,998.	1.5	25
402	Using research networks to create the comprehensive datasets needed to assess nutrient availability as a key determinant of terrestrial carbon cycling. Environmental Research Letters, 2018, 13, 125006.	2.2	36
403	A Large Committed Longâ€Term Sink of Carbon due to Vegetation Dynamics. Earth's Future, 2018, 6, 1413-1432.	2.4	24
404	Path-dependent reductions in CO2 emission budgets caused by permafrost carbon release. Nature Geoscience, 2018, 11, 830-835.	5.4	86
405	Precipitation thresholds regulate net carbon exchange at the continental scale. Nature Communications, 2018, 9, 3596.	5.8	39
406	Gross changes in forest area shape the future carbon balance of tropical forests. Biogeosciences, 2018, 15, 91-103.	1.3	3
407	Sensitivity of atmospheric CO2 growth rate to observed changes in terrestrial water storage. Nature, 2018, 560, 628-631.	13.7	295
408	Changing the retention properties of catchments and their influence on runoff under climate change. Environmental Research Letters, 2018, 13, 094019.	2.2	21
409	Temporal response of soil organic carbon after grasslandâ€related landâ€use change. Global Change Biology, 2018, 24, 4731-4746.	4.2	44
410	Evapotranspiration simulations in ISIMIP2aâ€"Evaluation of spatio-temporal characteristics with a comprehensive ensemble of independent datasets. Environmental Research Letters, 2018, 13, 075001.	2.2	38
411	Influence of high-latitude warming and land-use changes in the early 20th century northern Eurasian CO ₂ sink. Environmental Research Letters, 2018, 13, 065014.	2.2	3
412	Evaluating changes of biomass in global vegetation models: the role of turnover fluctuations and ENSO events. Environmental Research Letters, 2018, 13, 075002.	2.2	3
413	Can we separate industrial CH4 emission sources from atmospheric observations? - A test case for carbon isotopes, PMF and enhanced APCA. Atmospheric Environment, 2018, 187, 317-327.	1.9	10
414	Divergent response of seasonally dry tropical vegetation to climatic variations in dry and wet seasons. Global Change Biology, 2018, 24, 4709-4717.	4.2	20

#	Article	IF	Citations
415	Projected changes in crop yield mean and variability over West Africa in a world 1.5â€‰K warmer than the pre-industrial era. Earth System Dynamics, 2018, 9, 119-134.	2.7	31
416	Representing anthropogenic gross land use change, wood harvest, and forest age dynamics in a global vegetation model ORCHIDEE-MICT v8.4.2. Geoscientific Model Development, 2018, 11, 409-428.	1.3	30
417	Global patterns of crop yield stability under additional nutrient and water inputs. PLoS ONE, 2018, 13, e0198748.	1.1	40
418	Identification of spikes associated with local sources in continuous time series of atmospheric CO, CO₂ and CH₄. Atmospheric Measurement Techniques, 2018, 11, 1599-1614.	1.2	31
419	Smaller global and regional carbon emissions from gross land use change when considering sub-grid secondary land cohorts in aÂglobal dynamic vegetation model. Biogeosciences, 2018, 15, 1185-1201.	1.3	7
420	ORCHIDEE-SOM: modeling soil organic carbon (SOC) and dissolved organic carbon (DOC) dynamics along vertical soil profiles in Europe. Geoscientific Model Development, 2018, 11, 937-957.	1.3	52
421	The potential of satellite spectro-imagery for monitoring CO₂ emissions from large cities. Atmospheric Measurement Techniques, 2018, 11, 681-708.	1.2	45
422	Integrative Cropâ€Soilâ€Management Modeling to Assess Global Phosphorus Losses from Major Crop Cultivations. Global Biogeochemical Cycles, 2018, 32, 1074-1086.	1.9	29
423	Partitioning global land evapotranspiration using CMIP5 models constrained by observations. Nature Climate Change, 2018, 8, 640-646.	8.1	219
424	ORCHIDEE-MICT (v8.4.1), aÂland surface model for the high latitudes: model description and validation. Geoscientific Model Development, 2018, 11, 121-163.	1.3	135
425	ORCHIDEE-PEAT (revision 4596), a model for northern peatland CO₂, water, and energy fluxes on daily to annual scales. Geoscientific Model Development, 2018, 11, 497-519.	1.3	43
426	Land-use emissions play a critical role in land-based mitigation for Paris climate targets. Nature Communications, 2018, 9, 2938.	5.8	194
427	Low Phosphorus Availability Decreases Susceptibility of Tropical Primary Productivity to Droughts. Geophysical Research Letters, 2018, 45, 8231-8240.	1.5	21
428	Asymmetric responses of primary productivity to altered precipitation simulated by ecosystem models across three long-term grassland sites. Biogeosciences, 2018, 15, 3421-3437.	1.3	55
429	Contrasting effects of N addition on the N and P status of understory vegetation in plantations of sapling and mature<i>Larix principis-rupprechtii</i>. Journal of Plant Ecology, 2018, 11, 843-852.	1.2	9
430	FRY, a global database of fire patch functional traits derived from space-borne burned area products. Scientific Data, 2018, 5, 180132.	2.4	64
431	Simulating CH₄ and CO₂ over South and East Asia using the zoomed chemistry transport model LMDz-INCA. Atmospheric Chemistry and Physics, 2018, 18, 9475-9497.	1.9	18
432	Matrixâ€Based Sensitivity Assessment of Soil Organic Carbon Storage: A Case Study from the ORCHIDEEâ€MICT Model. Journal of Advances in Modeling Earth Systems, 2018, 10, 1790-1808.	1.3	17

#	Article	IF	Citations
433	Shifts in the dynamics of productivity signal ecosystem state transitions at the biomeâ€scale. Ecology Letters, 2018, 21, 1457-1466.	3.0	57
434	Global soil organic carbon removal by water erosion under climate change and land use change during ADâ€‰1850â€"2005. Biogeosciences, 2018, 15, 4459-4480.	1.3	68
435	The Impact of Variable Phytoplankton Stoichiometry on Projections of Primary Production, Food Quality, and Carbon Uptake in the Global Ocean. Global Biogeochemical Cycles, 2018, 32, 516-528.	1.9	71
436	Evaluation of CMIP5 Earth System Models for the Spatial Patterns of Biomass and Soil Carbon Turnover Times and Their Linkage with Climate. Journal of Climate, 2018, 31, 5947-5960.	1.2	36
437	Spatiotemporal pattern of terrestrial evapotranspiration in China during the past thirty years. Agricultural and Forest Meteorology, 2018, 259, 131-140.	1.9	75
438	Divergent hydrological response to large-scale afforestation and vegetation greening in China. Science Advances, 2018, 4, eaar4182.	4.7	287
439	Coupling of ecosystem-scale plant water storage and leaf phenology observed by satellite. Nature Ecology and Evolution, 2018, 2, 1428-1435.	3.4	114
440	Increased water-use efficiency and reduced CO2 uptake by plants during droughts at a continental scale. Nature Geoscience, 2018, 11, 744-748.	5.4	139
441	Quantifying the unauthorized lake water withdrawals and their impacts on the water budget of eutrophic lake Dianchi, China. Journal of Hydrology, 2018, 565, 39-48.	2.3	13
442	Lower land-use emissions responsible for increased net land carbon sink during the slow warming period. Nature Geoscience, 2018, 11, 739-743.	5.4	110
443	The important but weakening maize yield benefit of grain filling prolongation in the US Midwest. Global Change Biology, 2018, 24, 4718-4730.	4.2	41
444	Decelerating Autumn CO 2 Release With Warming Induced by Attenuated Temperature Dependence of Respiration in Northern Ecosystems. Geophysical Research Letters, 2018, 45, 5562-5571.	1.5	8
445	Converging Climate Sensitivities of European Forests Between Observed Radial Tree Growth and Vegetation Models. Ecosystems, 2018, 21, 410-425.	1.6	32
446	A global yield dataset for major lignocellulosic bioenergy crops based on field measurements. Scientific Data, 2018, 5, 180169.	2.4	35
447	Evaluation of the WRF-UCM mesoscale model and ECMWF global operational forecasts over the Paris region in the prospect of tracer atmospheric transport modeling. Elementa, 2018, 6, .	1.1	13
448	Global and regional phosphorus budgets in agricultural systems and their implications for phosphorus-use efficiency. Earth System Science Data, 2018, 10, 1-18.	3.7	106
449	Biophysics and vegetation cover change: a process-based evaluation framework for confronting land surface models with satellite observations. Earth System Science Data, 2018, 10, 1265-1279.	3.7	46
450	Global Carbon Budget 2018. Earth System Science Data, 2018, 10, 2141-2194.	3.7	1,167

#	Article	IF	Citations
451	Gross and net land cover changes in the main plant functional types derived from the annual ESA CCI land cover maps (1992â€“2015). Earth System Science Data, 2018, 10, 219-234.	3.7	193
452	Global Carbon Budget 2017. Earth System Science Data, 2018, 10, 405-448.	3.7	801
453	Plant invasion is associated with higher plantâ€“soil nutrient concentrations in nutrientâ€poor environments. Global Change Biology, 2017, 23, 1282-1291.	4.2	147
454	Consistent negative response of US crops to high temperatures in observations and crop models. Nature Communications, 2017, 8, 13931.	5.8	321
455	Historical carbon dioxide emissions caused by land-use changes are possibly larger than assumed. Nature Geoscience, 2017, 10, 79-84.	5.4	284
456	Compensatory water effects link yearly global land CO2 sink changes to temperature. Nature, 2017, 541, 516-520.	13.7	480
457	Terrestrial ecosystem model performance in simulating productivity and its vulnerability to climate change in the northern permafrost region. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 430-446.	1.3	47
458	Evaluation of climateâ€related carbon turnover processes in global vegetation models for boreal and temperate forests. Global Change Biology, 2017, 23, 3076-3091.	4.2	52
459	Elevated atmospheric CO₂ negatively impacts photosynthesis through radiative forcing and physiologyâ€mediated climate feedback. Geophysical Research Letters, 2017, 44, 1956-1963.	1.5	31
460	Sensitivity of land use change emission estimates to historical land use and land cover mapping. Global Biogeochemical Cycles, 2017, 31, 626-643.	1.9	48
461	Dominant role of plant physiology in trend and variability of gross primary productivity in North America. Scientific Reports, 2017, 7, 41366.	1.6	43
462	Emergent constraints on projections of declining primary production in the tropical oceans. Nature Climate Change, 2017, 7, 355-358.	8.1	108
463	Pathways for balancing CO2 emissions and sinks. Nature Communications, 2017, 8, 14856.	5.8	122
464	Changes in nutrient concentrations of leaves and roots in response to global change factors. Global Change Biology, 2017, 23, 3849-3856.	4.2	174
465	Interannual variation in methane emissions from tropical wetlands triggered by repeated El NiÃ±o Southern Oscillation. Global Change Biology, 2017, 23, 4706-4716.	4.2	28
466	Weakening temperature control on the interannual variations of spring carbon uptake across northern lands. Nature Climate Change, 2017, 7, 359-363.	8.1	183
467	The effects of teleconnections on carbon fluxes of global terrestrial ecosystems. Geophysical Research Letters, 2017, 44, 3209-3218.	1.5	58
468	Future productivity and phenology changes in European grasslands for different warming levels: implications for grassland management and carbon balance. Carbon Balance and Management, 2017, 12, 11.	1.4	51

#	Article	IF	Citations
469	Was the extreme Northern Hemisphere greening in 2015 predictable?. Environmental Research Letters, 2017, 12, 044016.	2.2	25
470	Global patterns of phosphatase activity in natural soils. Scientific Reports, 2017, 7, 1337.	1.6	296
471	Aligning agriculture and climate policy. Nature Climate Change, 2017, 7, 307-309.	8.1	213
472	Global forest carbon uptake due to nitrogen and phosphorus deposition from 1850 to 2100. Global Change Biology, 2017, 23, 4854-4872.	4.2	158
473	Diagnosing phosphorus limitations in natural terrestrial ecosystems in carbon cycle models. Earth's Future, 2017, 5, 730-749.	2.4	59
474	Seasonal Responses of Terrestrial Carbon Cycle to Climate Variations in CMIP5 Models: Evaluation and Projection. Journal of Climate, 2017, 30, 6481-6503.	1.2	12
475	Regional patterns of future runoff changes from Earth system models constrained by observation. Geophysical Research Letters, 2017, 44, 5540-5549.	1.5	26
476	Climate mitigation from vegetation biophysical feedbacks during the past three decades. Nature Climate Change, 2017, 7, 432-436.	8.1	323
477	Reconciling inconsistencies in precipitationâ€"productivity relationships: implications for climate change. New Phytologist, 2017, 214, 41-47.	3.5	286
478	The potential benefit of using forest biomass data in addition to carbon and water flux measurements to constrain ecosystem model parameters: Case studies at two temperate forest sites. Agricultural and Forest Meteorology, 2017, 234-235, 48-65.	1.9	19
479	Plausible rice yield losses under future climate warming. Nature Plants, 2017, 3, 16202.	4.7	114
480	Grassland gross carbon dioxide uptake based on an improved model tree ensemble approach considering human interventions: global estimation and covariation with climate. Global Change Biology, 2017, 23, 2720-2742.	4.2	24
481	A new approach to optimal discretization of plant functional types in a processâ€based ecosystem model with forest management: a case study for temperate conifers. Global Ecology and Biogeography, 2017, 26, 486-499.	2.7	5
482	Global wetland contribution to 2000â€"2012 atmospheric methane growth rate dynamics. Environmental Research Letters, 2017, 12, 094013.	2.2	129
483	Velocity of change in vegetation productivity over northern high latitudes. Nature Ecology and Evolution, 2017, 1, 1649-1654.	3.4	79
484	Regional contribution to variability and trends of global gross primary productivity. Environmental Research Letters, 2017, 12, 105005.	2.2	65
485	Letter to the Editor: Answer to the Viewpoint â€œSequestering Soil Organic Carbon: A Nitrogen Dilemmaâ€• Environmental Science & Technology, 2017, 51, 11502-11502.	4.6	14
486	Photosynthetic productivity and its efficiencies in ISIMIP2a biome models: benchmarking for impact assessment studies. Environmental Research Letters, 2017, 12, 085001.	2.2	41

#	Article	IF	Citations
487	Reducing the uncertainty of parameters controlling seasonal carbon and water fluxes in Chinese forests and its implication for simulated climate sensitivities. Global Biogeochemical Cycles, 2017, 31, 1344-1366.	1.9	11
488	Urbanization-induced population migration has reduced ambient PM _{2.5} concentrations in China. Science Advances, 2017, 3, e1700300.	4.7	161
489	Shifting from a fertilization-dominated to a warming-dominated period. Nature Ecology and Evolution, 2017, 1, 1438-1445.	3.4	167
490	Benchmarking carbon fluxes of the ISIMIP2a biome models. Environmental Research Letters, 2017, 12, 045002.	2.2	30
491	Atmospheric deposition, CO2, and change in the land carbon sink. Scientific Reports, 2017, 7, 9632.	1.6	62
492	Development of a new IHA method for impact assessment of climate change on flow regime. Global and Planetary Change, 2017, 156, 68-79.	1.6	71
493	The critical role of the routing scheme in simulating peak river discharge in global hydrological models. Environmental Research Letters, 2017, 12, 075003.	2.2	105
494	Modelling fertiliser significance in three major crops. European Journal of Agronomy, 2017, 90, 1-11.	1.9	6
495	Global land carbon sink response to temperature and precipitation varies with ENSO phase. Environmental Research Letters, 2017, 12, 064007.	2.2	39
496	Uncertainty in the response of terrestrial carbon sink to environmental drivers undermines carbon-climate feedback predictions. Scientific Reports, 2017, 7, 4765.	1.6	156
497	Trends in ecosystem recovery from drought. Nature, 2017, 548, 164-165.	13.7	16
498	Temperature increase reduces global yields of major crops in four independent estimates. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9326-9331.	3.3	1,708
499	Response of Water Use Efficiency to Global Environmental Change Based on Output From Terrestrial Biosphere Models. Global Biogeochemical Cycles, 2017, 31, 1639-1655.	1.9	63
500	Estimation of observation errors for large-scale atmospheric inversion of CO2 emissions from fossil fuel combustion. Tellus, Series B: Chemical and Physical Meteorology, 2017, 69, 1325723.	0.8	16
501	Contrasting effects of winter and summer climate on alpine timberline evolution in monsoon-dominated East Asia. Quaternary Science Reviews, 2017, 169, 278-287.	1.4	21
502	Spatial and temporal uncertainty of crop yield aggregations. European Journal of Agronomy, 2017, 88, 10-21.	1.9	63
503	Management outweighs climate change on affecting length of rice growing period for early rice and single rice in China during 1991â€"2012. Agricultural and Forest Meteorology, 2017, 233, 1-11.	1.9	48
504	How Much CO2 Is Taken Up by the European Terrestrial Biosphere?. Bulletin of the American Meteorological Society, 2017, 98, 665-671.	1.7	33

#	Article	IF	Citations
505	Increasing gap in human height between rich and poor countries associated to their different intakes of N and P. Scientific Reports, 2017, 7, 17671.	1.6	13
506	Higher temperature variability reduces temperature sensitivity of vegetation growth in Northern Hemisphere. Geophysical Research Letters, 2017, 44, 6173-6181.	1.5	33
507	Variability and quasi-decadal changes in the methane budget over the period 2000â€“2012. Atmospheric Chemistry and Physics, 2017, 17, 11135-11161.	1.9	85
508	Vegetation greenness and land carbon-flux anomalies associated with climate variations: a focus on the year 2015. Atmospheric Chemistry and Physics, 2017, 17, 13903-13919.	1.9	21
509	Assimilating satelliteâ€based canopy height within an ecosystem model to estimate aboveground forest biomass. Geophysical Research Letters, 2017, 44, 6823-6832.	1.5	11
510	Accounting for the climateâ€“carbon feedback in emission metrics. Earth System Dynamics, 2017, 8, 235-253.	2.7	71
511	A representation of the phosphorus cycle for ORCHIDEE (revisionÂ 4520). Geoscientific Model Development, 2017, 10, 3745-3770.	1.3	122
512	Land-use and land-cover change carbon emissions between 1901 and 2012 constrained by biomass observations. Biogeosciences, 2017, 14, 5053-5067.	1.3	58
513	ORCHILEAK (revision 3875): a new model branch to simulate carbon transfers along the terrestrialâ€“aquatic continuum of the Amazon basin. Geoscientific Model Development, 2017, 10, 3821-3859.	1.3	40
514	MERLIN: A French-German Space Lidar Mission Dedicated to Atmospheric Methane. Remote Sensing, 2017, 9, 1052.	1.8	88
515	Characterization of interferences to in situ observations of <i>Î´</i>¹³CH₄ and C₂H₆ when using a cavity ring-down spectrometer at industrial sites. Atmospheric Measurement Techniques, 2017, 10, 2077-2091.	1.2	18
516	Quantifying uncertainties of permafrost carbonâ€“climate feedbacks. Biogeosciences, 2017, 14, 3051-3066.	1.3	59
517	Assessing the impacts of 1.5â€¯Â°C global warming â€“ simulation protocol of the Inter-Sectoral Impact Model Intercomparison Project (ISIMIP2b). Geoscientific Model Development, 2017, 10, 4321-4345.	1.3	410
518	Global gridded crop model evaluation: benchmarking, skills, deficiencies and implications. Geoscientific Model Development, 2017, 10, 1403-1422.	1.3	213
519	Impacts of future deforestation and climate change on the hydrology of the Amazon Basin: a multi-model analysis with a new set of land-cover change scenarios. Hydrology and Earth System Sciences, 2017, 21, 1455-1475.	1.9	69
520	Towards a more detailed representation of high-latitude vegetation in the global land surface model ORCHIDEE (ORC-HL-VEGv1.0). Geoscientific Model Development, 2017, 10, 4693-4722.	1.3	36
521	Reviews and syntheses: An empirical spatiotemporal description of the global surfaceâ€“atmosphere carbon fluxes: opportunities and data limitations. Biogeosciences, 2017, 14, 3685-3703.	1.3	58
522	Carbonâ€“nitrogen interactions in idealized simulations with JSBACH (version 3.10). Geoscientific Model Development, 2017, 10, 2009-2030.	1.3	47

#	Article	IF	Citations
523	The compact Earth system model OSCARÂv2.2: description and first results. Geoscientific Model Development, 2017, 10, 271-319.	1.3	49
524	Demonstration of spatial greenhouse gas mapping using laser absorption spectrometers on local scales. Journal of Applied Remote Sensing, 2017, 11, 014002.	0.6	15
525	Possible pathways for balancing CO2 emissions and sinks as agreed in Paris COP21. Ecosistemas, 2017, 26, 103-105.	0.2	1
526	ORCHIDEE-CROP (v0), a new process-based agro-land surface model: model description and evaluation over Europe. Geoscientific Model Development, 2016, 9, 857-873.	1.3	51
527	Evaluation of airâ€“soil temperature relationships simulated by land surface models during winter across the permafrost region. Cryosphere, 2016, 10, 1721-1737.	1.5	38
528	Re-evaluating the 1940s CO₂ plateau. Biogeosciences, 2016, 13, 4877-4897.	1.3	22
529	Trends in soil solution dissolved organic carbon (DOC) concentrations across European forests. Biogeosciences, 2016, 13, 5567-5585.	1.3	23
530	A new stepwise carbon cycle data assimilation system using multiple data streams to constrain the simulated land surface carbon cycle. Geoscientific Model Development, 2016, 9, 3321-3346.	1.3	67
531	Towards a representation of priming on soil carbon decomposition in the global land biosphere model ORCHIDEE (versionÂ1.9.5.2). Geoscientific Model Development, 2016, 9, 841-855.	1.3	30
532	Combining livestock production information in a process-based vegetation model to reconstruct the history of grassland management. Biogeosciences, 2016, 13, 3757-3776.	1.3	34
533	How have past fire disturbances contributed to the current carbon balance of boreal ecosystems?. Biogeosciences, 2016, 13, 675-690.	1.3	34
534	The status and challenge of global fire modelling. Biogeosciences, 2016, 13, 3359-3375.	1.3	274
535	No-tillage lessens soil CO₂ emissions the most under arid and sandy soil conditions: results from a meta-analysis. Biogeosciences, 2016, 13, 3619-3633.	1.3	104
536	Simulated high-latitude soil thermal dynamics during the past 4 decades. Cryosphere, 2016, 10, 179-192.	1.5	17
537	Global patterns and climate drivers of waterâ€use efficiency in terrestrial ecosystems deduced from satelliteâ€based datasets and carbon cycle models. Global Ecology and Biogeography, 2016, 25, 311-323.	2.7	102
538	Canopy and physiological controls of GPP during drought and heat wave. Geophysical Research Letters, 2016, 43, 3325-3333.	1.5	75
539	Seasonal responses of terrestrial ecosystem waterâ€use efficiency to climate change. Global Change Biology, 2016, 22, 2165-2177.	4.2	100
540	Estimation of global black carbon direct radiative forcing and its uncertainty constrained by observations. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5948-5971.	1.2	66

#	Article	IF	Citations
541	Simulating soil organic carbon in yedoma deposits during the Last Glacial Maximum in a land surface model. Geophysical Research Letters, 2016, 43, 5133-5142.	1.5	18
542	In the wake of Paris Agreement, scientists must embrace new directions for climate change research. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7287-7290.	3.3	79
543	Relatively stable response of fruiting stage to warming and cooling relative to other phenological events. Ecology, 2016, 97, 1961-1969.	1.5	35
544	A comprehensive estimate of recent carbon sinks in China using both top-down and bottom-up approaches. Scientific Reports, 2016, 6, 22130.	1.6	55
545	Reducing human nitrogen use for food production. Scientific Reports, 2016, 6, 30104.	1.6	46
546	Changes in interannual climate sensitivities of terrestrial carbon fluxes during the 21st century predicted by CMIP5 Earth System Models. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 903-918.	1.3	17
547	Simulating the Earth system response to negative emissions. Environmental Research Letters, 2016, 11, 095012.	2.2	98
548	Precipitation and carbon-water coupling jointly control the interannual variability of global land gross primary production. Scientific Reports, 2016, 6, 39748.	1.6	57
549	Observation and integrated Earth-system science: A roadmap for 2016â€“2025. Advances in Space Research, 2016, 57, 2037-2103.	1.2	35
550	Species interactions slow warming-induced upward shifts of treelines on the Tibetan Plateau. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4380-4385.	3.3	221
551	Effect of climate change, CO₂ trends, nitrogen addition, and landâ€cover and management intensity changes on the carbon balance of European grasslands. Global Change Biology, 2016, 22, 338-350.	4.2	60
552	Greening of the Earth and its drivers. Nature Climate Change, 2016, 6, 791-795.	8.1	1,675
553	Seasonal and interannual changes in vegetation activity of tropical forests in Southeast Asia. Agricultural and Forest Meteorology, 2016, 224, 1-10.	1.9	63
554	Simulating the net ecosystem CO2 exchange and its components over winter wheat cultivation sites across a large climate gradient in Europe using the ORCHIDEE-STICS generic model. Agriculture, Ecosystems and Environment, 2016, 226, 1-17.	2.5	11
555	Long-term linear trends mask phenological shifts. International Journal of Biometeorology, 2016, 60, 1611-1613.	1.3	9
556	Variability of fire carbon emissions in equatorial Asia and its nonlinear sensitivity to El NiÃ±o. Geophysical Research Letters, 2016, 43, 10,472.	1.5	60
557	Revegetation in Chinaâ€™s Loess Plateau is approaching sustainable water resource limits. Nature Climate Change, 2016, 6, 1019-1022.	8.1	1,270
558	Field warming experiments shed light on the wheat yield response to temperature in China. Nature Communications, 2016, 7, 13530.	5.8	73

#	Article	IF	Citations
559	Substantial global carbon uptake by cement carbonation. Nature Geoscience, 2016, 9, 880-883.	5.4	355
560	Regional carbon fluxes from land use and land cover change in Asia, 1980â€“2009. Environmental Research Letters, 2016, 11, 074011.	2.2	31
561	Explaining inter-annual variability of gross primary productivity from plant phenology and physiology. Agricultural and Forest Meteorology, 2016, 226-227, 246-256.	1.9	81
562	European land CO2 sink influenced by NAO and East-Atlantic Pattern coupling. Nature Communications, 2016, 7, 10315.	5.8	74
563	Increased lightâ€use efficiency in northern terrestrial ecosystems indicated by CO₂ and greening observations. Geophysical Research Letters, 2016, 43, 11,339.	1.5	40
564	Variability in the sensitivity among model simulations of permafrost and carbon dynamics in the permafrost region between 1960 and 2009. Global Biogeochemical Cycles, 2016, 30, 1015-1037.	1.9	116
565	Reducing uncertainties in decadal variability of the global carbon budget with multiple datasets. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13104-13108.	3.3	39
566	What would dense atmospheric observation networks bring to the quantification of city CO₂ emissions?. Atmospheric Chemistry and Physics, 2016, 16, 7743-7771.	1.9	45
567	Estimation of fossil-fuel CO₂ emissions using satellite measurements of "proxy" species. Atmospheric Chemistry and Physics, 2016, 16, 13509-13540.	1.9	50
568	Inventory of anthropogenic methane emissions in mainland China from 1980 to 2010. Atmospheric Chemistry and Physics, 2016, 16, 14545-14562.	1.9	107
569	The first 1-year-long estimate of the Paris region fossil fuel CO₂ emissions based on atmospheric inversion. Atmospheric Chemistry and Physics, 2016, 16, 14703-14726.	1.9	87
570	Analysis of the potential of near-ground measurements of CO₂ and CH₄ in London, UK, for the monitoring of city-scale emissions using an atmospheric transport model. Atmospheric Chemistry and Physics, 2016, 16, 6735-6756.	1.9	30
571	Topâ€“down assessment of the Asian carbon budget since the mid 1990s. Nature Communications, 2016, 7, 10724.	5.8	93
572	Variation in stem mortality rates determines patterns of aboveâ€ground biomass in <scp>A</scp>mazonian forests: implications for dynamic global vegetation models. Global Change Biology, 2016, 22, 3996-4013.	4.2	116
573	Decrease in winter respiration explains 25% of the annual northern forest carbon sink enhancement over the last 30 years. Global Ecology and Biogeography, 2016, 25, 586-595.	2.7	16
574	Satellite-observed changes in terrestrial vegetation growth trends across the Asia-Pacific region associated with land cover and climate from 1982 to 2011. International Journal of Digital Earth, 2016, 9, 1055-1076.	1.6	12
575	Carbon and energy fluxes in cropland ecosystems: a model-data comparison. Biogeochemistry, 2016, 129, 53-76.	1.7	24
576	Lateral transport of soil carbon and landâˆ’atmosphere CO ₂ flux induced by water erosion in China. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6617-6622.	3.3	117

#	Article	IF	Citations
577	Human-induced greening of the northern extratropical land surface. Nature Climate Change, 2016, 6, 959-963.	8.1	145
578	Toward more realistic projections of soil carbon dynamics by Earth system models. Global Biogeochemical Cycles, 2016, 30, 40-56.	1.9	343
579	Biophysical and economic limits to negative CO2 emissions. Nature Climate Change, 2016, 6, 42-50.	8.1	973
580	The contribution of Chinaâ€™s emissions to global climate forcing. Nature, 2016, 531, 357-361.	13.7	214
581	The terrestrial biosphere as a net source of greenhouse gases to the atmosphere. Nature, 2016, 531, 225-228.	13.7	402
582	The exposure, sensitivity and vulnerability of natural vegetation in China to climate thermal variability (1901â€"2013): An indicator-based approach. Ecological Indicators, 2016, 63, 258-272.	2.6	29
583	Re-estimating NH₃ Emissions from Chinese Cropland by a New Nonlinear Model. Environmental Science & Technology, 2016, 50, 564-572.	4.6	77
584	Major forest changes and land cover transitions based on plant functional types derived from the ESA CCI Land Cover product. International Journal of Applied Earth Observation and Geoinformation, 2016, 47, 30-39.	1.4	52
585	Reduced sediment transport in the Yellow River due to anthropogenic changes. Nature Geoscience, 2016, 9, 38-41.	5.4	948
586	Global Carbon Budget 2016. Earth System Science Data, 2016, 8, 605-649.	3.7	905
587	The global methane budget 2000â€"2012. Earth System Science Data, 2016, 8, 697-751.	3.7	824
588	International Geosphereâ€"Biosphere Programme and Earth system science: Three decades of co-evolution. Anthropocene, 2015, 12, 3-16.	1.6	57
589	Spatiotemporal patterns of terrestrial gross primary production: A review. Reviews of Geophysics, 2015, 53, 785-818.	9.0	432
590	Global patterns and controls of soil organic carbon dynamics as simulated by multiple terrestrial biosphere models: Current status and future directions. Global Biogeochemical Cycles, 2015, 29, 775-792.	1.9	241
591	Influence of anthropogenic aerosol deposition on the relationship between oceanic productivity and warming. Geophysical Research Letters, 2015, 42, 10745-10754.	1.5	40
592	An attempt at estimating Paris area CO₂ emissions from atmospheric concentration measurements. Atmospheric Chemistry and Physics, 2015, 15, 1707-1724.	1.9	169
593	Multicriteria evaluation of discharge simulation in Dynamic Global Vegetation Models. Journal of Geophysical Research D: Atmospheres, 2015, 120, 7488-7505.	1.2	25
594	Toward â€œoptimalâ€• integration of terrestrial biosphere models. Geophysical Research Letters, 2015, 42, 4418-4428.	1.5	48

#	ARTICLE	IF	CITATIONS
595	Disentangling climatic and anthropogenic controls on global terrestrial evapotranspiration trends. Environmental Research Letters, 2015, 10, 094008.	2.2	119
596	Sources, transport and deposition of iron in the global atmosphere. Atmospheric Chemistry and Physics, 2015, 15, 6247-6270.	1.9	85
597	Long-lived atmospheric trace gases measurements in flask samples from three stations in India. Atmospheric Chemistry and Physics, 2015, 15, 9819-9849.	1.9	47
598	Decadal trends in global CO emissions as seen by MOPITT. Atmospheric Chemistry and Physics, 2015, 15, 13433-13451.	1.9	69
599	Global change: Put people at the centre of global risk management. Nature, 2015, 519, 151-153.	13.7	31
600	On the potential of the ICOS atmospheric CO₂ measurement network for estimating the biogenic CO₂ budget of Europe. Atmospheric Chemistry and Physics, 2015, 15, 12765-12787.	1.9	14
601	On the ability of a global atmospheric inversion to constrain variations of CO₂ fluxes over Amazonia. Atmospheric Chemistry and Physics, 2015, 15, 8423-8438.	1.9	8
602	The greenhouse gas balance of European grasslands. Global Change Biology, 2015, 21, 3748-3761.	4.2	58
603	Investigation of the atmospheric boundary layer depth variability and its impact on the ²²²Rn concentration at a rural site in France. Journal of Geophysical Research D: Atmospheres, 2015, 120, 623-643.	1.2	56
604	Refining soil organic carbon stock estimates for Chinaâ€™s palustrine wetlands. Environmental Research Letters, 2015, 10, 124016.	2.2	8
605	Assessment of model estimates of land-atmosphere CO₂ exchange across Northern Eurasia. Biogeosciences, 2015, 12, 4385-4405.	1.3	25
606	Using satellite data to improve the leaf phenology of a global terrestrial biosphere model. Biogeosciences, 2015, 12, 7185-7208.	1.3	85
607	An observation-constrained multi-physics WRF ensemble for simulating European mega heat waves. Geoscientific Model Development, 2015, 8, 2285-2298.	1.3	44
608	Methane emission estimates using chamber and tracer release experiments for a municipal waste water treatment plant. Atmospheric Measurement Techniques, 2015, 8, 2853-2867.	1.2	36
609	Recent trends and drivers of regional sources and sinks of carbon dioxide. Biogeosciences, 2015, 12, 653-679.	1.3	587
610	Decomposing uncertainties in the future terrestrial carbon budget associated with emission scenarios, climate projections, and ecosystem simulations using the ISI-MIP results. Earth System Dynamics, 2015, 6, 435-445.	2.7	40
611	Improving the ISBA_{CC} land surface model simulation of water and carbon fluxes and stocks over the Amazon forest. Geoscientific Model Development, 2015, 8, 1709-1727.	1.3	33
612	A framework for the cross-sectoral integration of multi-model impact projections: land use decisions under climate impacts uncertainties. Earth System Dynamics, 2015, 6, 447-460.	2.7	38

#	Article	IF	Citations
613	Projected strengthening of Amazonian dry season by constrained climate model simulations. Nature Climate Change, 2015, 5, 656-660.	8.1	174
614	Has the advancing onset of spring vegetation greenâ€up slowed down or changed abruptly over the last three decades?. Global Ecology and Biogeography, 2015, 24, 621-631.	2.7	111
615	Long-term Wood Production in Water-Limited Forests: Evaluating Potential CO2 Fertilization Along with Historical Confounding Factors. Ecosystems, 2015, 18, 1043-1055.	1.6	13
616	Modelling the role of fires in the terrestrial carbon balance by incorporating SPITFIRE into the global vegetation model ORCHIDEE â€“ Part 2: Carbon emissions and the role of fires in the global carbon balance. Geoscientific Model Development, 2015, 8, 1321-1338.	1.3	69
617	New model for capturing the variations of fertilizerâ€induced emission factors of N₂O. Global Biogeochemical Cycles, 2015, 29, 885-897.	1.9	42
618	Joint control of terrestrial gross primary productivity by plant phenology and physiology. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2788-2793.	3.3	265
619	Change in terrestrial ecosystem waterâ€use efficiency over the last three decades. Global Change Biology, 2015, 21, 2366-2378.	4.2	215
620	Benchmarking the seasonal cycle of CO₂ fluxes simulated by terrestrial ecosystem models. Global Biogeochemical Cycles, 2015, 29, 46-64.	1.9	48
621	Negative emissions physically needed to keep global warming below 2â€‰Â°C. Nature Communications, 2015, 6, 7958.	5.8	265
622	Evaporative cooling over the Tibetan Plateau induced by vegetation growth. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9299-9304.	3.3	404
623	Spatial and temporal contrasts in the distribution of crops and pastures across Amazonia: A new agricultural land use data set from census data since 1950. Global Biogeochemical Cycles, 2015, 29, 898-916.	1.9	8
624	Effects of climate extremes on the terrestrial carbon cycle: concepts, processes and potential future impacts. Global Change Biology, 2015, 21, 2861-2880.	4.2	683
625	Sensitivity of global terrestrial carbon cycle dynamics to variability in satelliteâ€observed burned area. Global Biogeochemical Cycles, 2015, 29, 207-222.	1.9	29
626	Water-use efficiency and transpiration across European forests during the Anthropocene. Nature Climate Change, 2015, 5, 579-583.	8.1	357
627	Leaf onset in the northern hemisphere triggered by daytime temperature. Nature Communications, 2015, 6, 6911.	5.8	384
628	Spatial patterns in CO₂ evasion from the global river network. Global Biogeochemical Cycles, 2015, 29, 534-554.	1.9	223
629	Declining global warming effects on the phenology of spring leaf unfolding. Nature, 2015, 526, 104-107.	13.7	637
630	Reply to 'Uncertain effects of nutrient availability on global forest carbon balance' and 'Data quality and the role of nutrients in forest carbon-use efficiency'. Nature Climate Change, 2015, 5, 960-961.	8.1	2

#	Article	IF	Citations
631	A simplified, data-constrained approach to estimate the permafrost carbonâ€“climate feedback. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140423.	1.6	149
632	Seasonally different response of photosynthetic activity to daytime and nightâ€time warming in the Northern Hemisphere. Global Change Biology, 2015, 21, 377-387.	4.2	72
633	Biomass production efficiency controlled by management in temperate and boreal ecosystems. Nature Geoscience, 2015, 8, 843-846.	5.4	109
634	Regional air pollution brightening reverses the greenhouse gases induced warmingâ€elevation relationship. Geophysical Research Letters, 2015, 42, 4563-4572.	1.5	30
635	Reduced carbon emission estimates from fossil fuel combustion and cement production in China. Nature, 2015, 524, 335-338.	13.7	1,185
636	Sunlight mediated seasonality in canopy structure and photosynthetic activity of Amazonian rainforests. Environmental Research Letters, 2015, 10, 064014.	2.2	90
637	Significant contribution of combustion-related emissions to the atmospheric phosphorus budget. Nature Geoscience, 2015, 8, 48-54.	5.4	207
638	Modeled Changes in Potential Grassland Productivity and in Grass-Fed Ruminant Livestock Density in Europe over 1961â€“2010. PLoS ONE, 2015, 10, e0127554.	1.1	34
639	Global Carbon Budget 2015. Earth System Science Data, 2015, 7, 349-396.	3.7	616
640	Global carbon budget 2014. Earth System Science Data, 2015, 7, 47-85.	3.7	463
641	Improving the dynamics of Northern Hemisphere high-latitude vegetation in the ORCHIDEE ecosystem model. Geoscientific Model Development, 2015, 8, 2263-2283.	1.3	36
642	Carbon cycle uncertainty in the Alaskan Arctic. Biogeosciences, 2014, 11, 4271-4288.	1.3	92
643	Rain-Use-Efficiency: What it Tells us about the Conflicting Sahel Greening and Sahelian Paradox. Remote Sensing, 2014, 6, 3446-3474.	1.8	81
644	1982â€“2010 Trends of Light Use Efficiency and Inherent Water Use Efficiency in African vegetation: Sensitivity to Climate and Atmospheric CO2 Concentrations. Remote Sensing, 2014, 6, 8923-8944.	1.8	21
645	Suitability of modelled and remotely sensed essential climate variables for monitoring Euro-Mediterranean droughts. Geoscientific Model Development, 2014, 7, 931-946.	1.3	40
646	Modeling sugarcane yield with a process-based model from site to continental scale: uncertainties arising from model structure and parameter values. Geoscientific Model Development, 2014, 7, 1225-1245.	1.3	16
647	Current systematic carbon-cycle observations and the need for implementing a policy-relevant carbon observing system. Biogeosciences, 2014, 11, 3547-3602.	1.3	189
648	Ecosystem model optimization using in situ flux observations: benefit of Monte Carlo versus variational schemes and analyses of the year-to-year model performances. Biogeosciences, 2014, 11, 7137-7158.	1.3	31

#	Article	IF	Citations
649	Impact of droughts on the carbon cycle in European vegetation: a probabilistic risk analysis using six vegetation models. Biogeosciences, 2014, 11, 6357-6375.	1.3	32
650	Quantifying uncertainties in soil carbon responses to changes in global mean temperature and precipitation. Earth System Dynamics, 2014, 5, 197-209.	2.7	53
651	Climate-mediated spatiotemporal variability in terrestrial productivity across Europe. Biogeosciences, 2014, 11, 3057-3068.	1.3	10
652	A full greenhouse gases budget of Africa: synthesis, uncertainties, and vulnerabilities. Biogeosciences, 2014, 11, 381-407.	1.3	162
653	Composition changes of eroded carbon at different spatial scales in a tropical watershed suggest enrichment of degraded material during transport. Biogeosciences, 2014, 11, 3299-3305.	1.3	3
654	Testing conceptual and physically based soil hydrology schemes against observations for the Amazon Basin. Geoscientific Model Development, 2014, 7, 1115-1136.	1.3	49
655	Predicting the response of the Amazon rainforest to persistent drought conditions under current and future climates: a major challenge for global land surface models. Geoscientific Model Development, 2014, 7, 2933-2950.	1.3	39
656	Historical land-use-induced evapotranspiration changes estimated from present-day observations and reconstructed land-cover maps. Hydrology and Earth System Sciences, 2014, 18, 3571-3590.	1.9	30
657	A worldwide analysis of spatiotemporal changes in water balanceâ€based evapotranspiration from 1982 to 2009. Journal of Geophysical Research D: Atmospheres, 2014, 119, 1186-1202.	1.2	109
658	Asymmetric sensitivity of first flowering date to warming and cooling in alpine plants. Ecology, 2014, 95, 3387-3398.	1.5	67
659	High carbon dioxide uptake by subtropical forest ecosystems in the East Asian monsoon region. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4910-4915.	3.3	403
660	Carbon residence time dominates uncertainty in terrestrial vegetation responses to future climate and atmospheric CO ₂. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3280-3285.	3.3	458
661	High-precision quasi-continuous atmospheric greenhouse gas measurements at Trainou tower (OrlÃ©ans forest, France). Atmospheric Measurement Techniques, 2014, 7, 2283-2296.	1.2	30
662	Nutrient availability as the key regulator of global forest carbon balance. Nature Climate Change, 2014, 4, 471-476.	8.1	383
663	The influence of local spring temperature variance on temperature sensitivity of spring phenology. Global Change Biology, 2014, 20, 1473-1480.	4.2	90
664	ORCHIDEEâ€STICS, a processâ€based model of sugarcane biomass production: calibration of model parameters governing phenology. GCB Bioenergy, 2014, 6, 606-620.	2.5	14
665	Linking variability in soil solution dissolved organic carbon to climate, soil type, and vegetation type. Global Biogeochemical Cycles, 2014, 28, 497-509.	1.9	91
666	Betting on negative emissions. Nature Climate Change, 2014, 4, 850-853.	8.1	846

#	Article	IF	Citations
667	Global carbon budget 2013. Earth System Science Data, 2014, 6, 235-263.	3.7	311
668	Exposure to ambient black carbon derived from a unique inventory and high-resolution model. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2459-2463.	3.3	148
669	In situ measurement of atmospheric CO₂ at the four WMO/GAW stations in China. Atmospheric Chemistry and Physics, 2014, 14, 2541-2554.	1.9	102
670	Afforestation in China cools local land surface temperature. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2915-2919.	3.3	501
671	Modelling the role of fires in the terrestrial carbon balance by incorporating SPITFIRE into the global vegetation model ORCHIDEE â€“ Part 1: simulating historical global burned area and fire regimes. Geoscientific Model Development, 2014, 7, 2747-2767.	1.3	109
672	Ten years of global burned area products from spaceborne remote sensingâ€"A review: Analysis of user needs and recommendations for future developments. International Journal of Applied Earth Observation and Geoinformation, 2014, 26, 64-79.	1.4	185
673	African crop yield reductions due to increasingly unbalanced Nitrogen and Phosphorus consumption. Global Change Biology, 2014, 20, 1278-1288.	4.2	67
674	Terrestrial carbon cycle affected by non-uniform climate warming. Nature Geoscience, 2014, 7, 173-180.	5.4	226
675	Aboveâ€ground woody carbon sequestration measured from tree rings is coherent with net ecosystem productivity at five eddyâ€covariance sites. New Phytologist, 2014, 201, 1289-1303.	3.5	152
676	Unexpected role of winter precipitation in determining heat requirement for spring vegetation greenâ€up at northern middle and high latitudes. Global Change Biology, 2014, 20, 3743-3755.	4.2	159
677	Contribution of semi-arid ecosystems to interannual variability of the global carbon cycle. Nature, 2014, 509, 600-603.	13.7	1,054
678	A two-fold increase of carbon cycle sensitivity to tropical temperature variations. Nature, 2014, 506, 212-215.	13.7	284
679	Carbon Leakage through the Terrestrial-aquatic Interface: Implications for the Anthropogenic CO2 Budget. Procedia Earth and Planetary Science, 2014, 10, 319-324.	0.6	9
680	Linearity between temperature peak and bioenergy CO2 emission rates. Nature Climate Change, 2014, 4, 983-987.	8.1	33
681	Evidence for a weakening relationship between interannual temperature variability and northern vegetation activity. Nature Communications, 2014, 5, 5018.	5.8	414
682	Trend in Global Black Carbon Emissions from 1960 to 2007. Environmental Science & Technology, 2014, 48, 6780-6787.	4.6	114
683	Impact of largeâ€scale climate extremes on biospheric carbon fluxes: An intercomparison based on MsTMIP data. Global Biogeochemical Cycles, 2014, 28, 585-600.	1.9	181
684	Sharing a quota on cumulative carbon emissions. Nature Climate Change, 2014, 4, 873-879.	8.1	295

#	Article	IF	Citations
685	A tree-ring perspective on the terrestrial carbon cycle. Oecologia, 2014, 176, 307-322.	0.9	131
686	Preferential cooling of hot extremes from cropland albedo management. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 9757-9761.	3.3	151
687	Widespread decline of Congo rainforest greenness in the past decade. Nature, 2014, 509, 86-90.	13.7	351
688	A New High-Resolution N₂O Emission Inventory for China in 2008. Environmental Science & Technology, 2014, 48, 8538-8547.	4.6	82
689	Effects of double cropping on summer climate of the North China Plain and neighbouring regions. Nature Climate Change, 2014, 4, 615-619.	8.1	84
690	Mechanisms of water supply and vegetation demand govern the seasonality and magnitude of evapotranspiration in Amazonia and Cerrado. Agricultural and Forest Meteorology, 2014, 191, 33-50.	1.9	105
691	Changes in vegetation photosynthetic activity trends across the Asiaâ€“Pacific region over the last three decades. Remote Sensing of Environment, 2014, 144, 28-41.	4.6	140
692	Evaluation of the ORCHIDEE ecosystem model over Africa against 25 years of satellite-based water and carbon measurements. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1554-1575.	1.3	31
693	Fire regimes and variability in aboveground woody biomass in miombo woodland. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1014-1029.	1.3	14
694	Constraining CO₂ emissions from open biomass burning by satellite observations of co-emitted species: a method and its application to wildfires in Siberia. Atmospheric Chemistry and Physics, 2014, 14, 10383-10410.	1.9	69
695	Forecasting global atmospheric CO₂. Atmospheric Chemistry and Physics, 2014, 14, 11959-11983.	1.9	74
696	Land-surface controls on afternoon precipitation diagnosed from observational data: uncertainties and confounding factors. Atmospheric Chemistry and Physics, 2014, 14, 8343-8367.	1.9	63
697	Recent trends in Inner Asian forest dynamics to temperature and precipitation indicate high sensitivity to climate change. Agricultural and Forest Meteorology, 2013, 178-179, 31-45.	1.9	108
698	Summer temperatures in Europe and land heat fluxes in observation-based data and regional climate model simulations. Climate Dynamics, 2013, 41, 455-477.	1.7	43
699	Expert assessment of vulnerability of permafrost carbon to climate change. Climatic Change, 2013, 119, 359-374.	1.7	257
700	Drought Influences the Accuracy of Simulated Ecosystem Fluxes: A Model-Data Meta-analysis for Mediterranean Oak Woodlands. Ecosystems, 2013, 16, 749-764.	1.6	42
701	Climate extremes and the carbon cycle. Nature, 2013, 500, 287-295.	13.7	1,357
702	Present-day and future Amazonian precipitation in global climate models: CMIP5 versus CMIP3. Climate Dynamics, 2013, 41, 2921-2936.	1.7	146

#	Article	IF	Citations
703	Does the integration of the dynamic nitrogen cycle in a terrestrial biosphere model improve the long-term trend of the leaf area index?. Climate Dynamics, 2013, 40, 2535-2548.	1.7	8
704	Asymmetric effects of daytime and night-time warming on Northern Hemisphere vegetation. Nature, 2013, 501, 88-92.	13.7	482
705	Evaluating the Land and Ocean Components of the Global Carbon Cycle in the CMIP5 Earth System Models. Journal of Climate, 2013, 26, 6801-6843.	1.2	398
706	Evaluation of continental carbon cycle simulations with North American flux tower observations. Ecological Monographs, 2013, 83, 531-556.	2.4	75
707	Precipitation amount, seasonality and frequency regulate carbon cycling of a semi-arid grassland ecosystem in Inner Mongolia, China: A modeling analysis. Agricultural and Forest Meteorology, 2013, 178-179, 46-55.	1.9	130
708	Disappearing Lakes in Semiarid Northern China: Drivers and Environmental Impact. Environmental Science & Technology, 2013, 47, 12107-12114.	4.6	74
709	Global carbon dioxide emissions from inland waters. Nature, 2013, 503, 355-359.	13.7	1,670
710	Human-induced nitrogenâ€“phosphorus imbalances alter natural and managed ecosystems across the globe. Nature Communications, 2013, 4, 2934.	5.8	1,013
711	The phosphorus trilemma. Nature Geoscience, 2013, 6, 897-898.	5.4	103
712	Attributing the increase in atmospheric CO2 to emitters and absorbers. Nature Climate Change, 2013, 3, 926-930.	8.1	63
713	Three decades of global methane sources and sinks. Nature Geoscience, 2013, 6, 813-823.	5.4	1,649
714	Largeâ€scale variations in the vegetation growing season and annual cycle of atmospheric <scp><scp>CO₂</scp></scp> at high northern latitudes from 1950 to 2011. Global Change Biology, 2013, 19, 3167-3183.	4.2	273
715	The challenge to keep global warming below 2 Â°C. Nature Climate Change, 2013, 3, 4-6.	8.1	809
716	Temperature and vegetation seasonality diminishment over northern lands. Nature Climate Change, 2013, 3, 581-586.	8.1	485
717	Site- and species-specific responses of forest growth to climate across the European continent. Global Ecology and Biogeography, 2013, 22, 706-717.	2.7	297
718	Anthropogenic perturbation of the carbon fluxes from land to ocean. Nature Geoscience, 2013, 6, 597-607.	5.4	937
719	Evaluation of terrestrial carbon cycle models for their response to climate variability and to <scp><scp>CO₂</scp></scp> trends. Global Change Biology, 2013, 19, 2117-2132.	4.2	617
720	Future European temperature change uncertainties reduced by using land heat flux observations. Geophysical Research Letters, 2013, 40, 2242-2245.	1.5	38

#	Article	IF	Citations
721	Hydrologic benchmarking of meteorological drought indices at interannual to climate change timescales: a case study over the Amazon and Mississippi river basins. Hydrology and Earth System Sciences, 2013, 17, 4885-4895.	1.9	52
722	The global carbon budget 1959â€“2011. Earth System Science Data, 2013, 5, 165-185.	3.7	527
723	A multi-model analysis of risk of ecosystem shifts under climate change. Environmental Research Letters, 2013, 8, 044018.	2.2	69
724	Committed changes in tropical tree cover under the projected 21st century climate change. Scientific Reports, 2013, 3, 1951.	1.6	20
725	Boreal and temperate snow cover variations induced by black carbon emissions in the middle of the 21st century. Cryosphere, 2013, 7, 537-554.	1.5	25
726	A theoretical framework for the net land-to-atmosphere CO₂ flux and its implications in the definition of "emissions from land-use change". Earth System Dynamics, 2013, 4, 171-186.	2.7	74
727	Climate change and plant dispersal along corridors in fragmented landscapes of Mesoamerica. Ecology and Evolution, 2013, 3, 2917-2932.	0.8	20
728	Future changes in precipitation and impacts on extreme streamflow over Amazonian sub-basins. Environmental Research Letters, 2013, 8, 014035.	2.2	64
729	Variations in atmospheric CO ₂ growth rates coupled with tropical temperature. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13061-13066.	3.3	144
730	High-resolution mapping of combustion processes and implications for CO₂ emissions. Atmospheric Chemistry and Physics, 2013, 13, 5189-5203.	1.9	164
731	Regional inversion of CO₂ ecosystem fluxes from atmospheric measurements: reliability of the uncertainty estimates. Atmospheric Chemistry and Physics, 2013, 13, 9039-9056.	1.9	60
732	Multiannual changes of CO₂ emissions in China: indirect estimates derived from satellite measurements of tropospheric NO₂ columns. Atmospheric Chemistry and Physics, 2013, 13, 9415-9438.	1.9	45
733	Interannual variability in tropospheric nitrous oxide. Geophysical Research Letters, 2013, 40, 4426-4431.	1.5	15
734	Evaluation of an improved intermediate complexity snow scheme in the ORCHIDEE land surface model. Journal of Geophysical Research D: Atmospheres, 2013, 118, 6064-6079.	1.2	63
735	The carbon budget of South Asia. Biogeosciences, 2013, 10, 513-527.	1.3	94
736	Simulating boreal forest carbon dynamics after stand-replacing fire disturbance: insights from a global process-based vegetation model. Biogeosciences, 2013, 10, 8233-8252.	1.3	12
737	Can we model observed soil carbon changes from a dense inventory? A case study over England and Wales using three versions of the ORCHIDEE ecosystem model (AR5, AR5-PRIM and O-CN). Geoscientific Model Development, 2013, 6, 2153-2163.	1.3	11
738	Incorporating grassland management in ORCHIDEE: model description and evaluation at 11 eddy-covariance sites in Europe. Geoscientific Model Development, 2013, 6, 2165-2181.	1.3	58

#	Article	IF	Citations
739	Inferring past land use-induced changes in surface albedo from satellite observations: a useful tool to evaluate model simulations. Biogeosciences, 2013, 10, 1501-1516.	1.3	40
740	The relative importance of decomposition and transport mechanisms in accounting for soil organic carbon profiles. Biogeosciences, 2013, 10, 2379-2392.	1.3	26
741	Atmospheric turbulence triggers pronounced diel pattern in karst carbonate geochemistry. Biogeosciences, 2013, 10, 5009-5017.	1.3	38
742	Response of methane emissions from wetlands to the Last Glacial Maximum and an idealized Dansgaardâ€œOeschger climate event: insights from two models of different complexity. Climate of the Past, 2013, 9, 149-171.	1.3	16
743	Benchmark products for land evapotranspiration: LandFlux-EVAL multi-data set synthesis. Hydrology and Earth System Sciences, 2013, 17, 3707-3720.	1.9	310
744	Global Priority Conservation Areas in the Face of 21st Century Climate Change. PLoS ONE, 2013, 8, e54839.	1.1	38
745	The Nexus Land-Use model version 1.0, an approach articulating biophysical potentials and economic dynamics to model competition for land-use. Geoscientific Model Development, 2012, 5, 1297-1322.	1.3	38
746	Modeling Potential Equilibrium States of Vegetation and Terrestrial Water Cycle of Mesoamerica under Climate Change Scenarios*. Journal of Hydrometeorology, 2012, 13, 665-680.	0.7	47
747	Spatio-temporal patterns of the area experiencing negative vegetation growth anomalies in China over the last three decades. Environmental Research Letters, 2012, 7, 035701.	2.2	65
748	Seasonal leaf dynamics for tropical evergreen forests in a process-based global ecosystem model. Geoscientific Model Development, 2012, 5, 1091-1108.	1.3	58
749	Multi-scale validation of a new soil freezing scheme for a land-surface model with physically-based hydrology. Cryosphere, 2012, 6, 407-430.	1.5	99
750	Global evapotranspiration over the past three decades: estimation based on the water balance equation combined with empirical models. Environmental Research Letters, 2012, 7, 014026.	2.2	126
751	Variation of CO₂ mole fraction in the lower free troposphere, in the boundary layer and at the surface. Atmospheric Chemistry and Physics, 2012, 12, 8865-8875.	1.9	19
752	Surface Urban Heat Island Across 419 Global Big Cities. Environmental Science & Technology, 2012, 46, 696-703.	4.6	864
753	Intercomparison of MODIS albedo retrievals and in situ measurements across the global FLUXNET network. Remote Sensing of Environment, 2012, 121, 323-334.	4.6	259
754	Iconic CO ₂ Time Series at Risk. Science, 2012, 337, 1038-1040.	6.0	15
755	Terrestrial biosphere model performance for interâ€annual variability of landâ€atmosphere <scp><scp>CO₂</scp></scp> exchange. Global Change Biology, 2012, 18, 1971-1987.	4.2	232
756	How the insulating properties of snow affect soil carbon distribution in the continental panâ€Arctic area. Journal of Geophysical Research, 2012, 117, .	3.3	97

#	Article	IF	Citations
757	Seasonal variation of N₂O emissions in France inferred from atmospheric N₂O and ²²²Rn measurements. Journal of Geophysical Research, 2012, 117, .	3.3	26
758	State-dependent errors in a land surface model across biomes inferred from eddy covariance observations on multiple timescales. Ecological Modelling, 2012, 246, 11-25.	1.2	18
759	Impacts of climate and CO2 changes on the vegetation growth and carbon balance of Qinghaiâ€“Tibetan grasslands over the past five decades. Global and Planetary Change, 2012, 98-99, 73-80.	1.6	248
760	Large inert carbon pool in the terrestrial biosphere during the Last Glacial Maximum. Nature Geoscience, 2012, 5, 74-79.	5.4	145
761	A global analysis of soil moisture derived from satellite observations and a land surface model. Hydrology and Earth System Sciences, 2012, 16, 833-847.	1.9	69
762	Modelling LAI, surface water and carbon fluxes at high-resolution over France: comparison of ISBA-A-gs and ORCHIDEE. Biogeosciences, 2012, 9, 439-456.	1.3	57
763	The European land and inland water CO₂, CO, CH₄ and N₂O balance between 2001 and 2005. Biogeosciences, 2012, 9, 3357-3380.	1.3	53
764	Carbon Cycle Uncertainty in REgional Carbon Cycle Assessment and Processes (RECCAP). Biogeosciences, 2012, 9, 2889-2904.	1.3	30
765	Modelling sub-grid wetland in the ORCHIDEE global land surface model: evaluation against river discharges and remotely sensed data. Geoscientific Model Development, 2012, 5, 941-962.	1.3	58
766	How errors on meteorological variables impact simulated ecosystem fluxes: a case study for six French sites. Biogeosciences, 2012, 9, 2537-2564.	1.3	33
767	The carbon budget of terrestrial ecosystems in East Asia over the last two decades. Biogeosciences, 2012, 9, 3571-3586.	1.3	103
768	A framework for benchmarking land models. Biogeosciences, 2012, 9, 3857-3874.	1.3	267
769	A synthesis of carbon dioxide emissions from fossil-fuel combustion. Biogeosciences, 2012, 9, 1845-1871.	1.3	271
770	An estimate of the terrestrial carbon budget of Russia using inventory-based, eddy covariance and inversion methods. Biogeosciences, 2012, 9, 5323-5340.	1.3	113
771	Terrestrial biosphere models need better representation of vegetation phenology: results from the <scp>N</scp>orth <scp>A</scp>merican <scp>C</scp>arbon <scp>P</scp>rogram <scp>S</scp>ite <scp>S</scp>ynthesis. Global Change Biology, 2012, 18, 566-584.	4.2	583
772	Fertile forests produce biomass more efficiently. Ecology Letters, 2012, 15, 520-526.	3.0	273
773	A Large and Persistent Carbon Sink in the Worldâ€™s Forests. Science, 2011, 333, 988-993.	6.0	5,393
774	Forest biomass allometry in global land surface models. Global Biogeochemical Cycles, 2011, 25, n/a-n/a.	1.9	52

#	Article	IF	Citations
775	Evaluation of global observations-based evapotranspiration datasets and IPCC AR4 simulations. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	312
776	Seasonal patterns of CO₂fluxes in Amazon forests: Fusion of eddy covariance data and the ORCHIDEE model. Journal of Geophysical Research, 2011, 116, .	3.3	75
777	An International Effort to Quantify Regional Carbon Fluxes. Eos, 2011, 92, 81-82.	0.1	93
778	Characterizing the performance of ecosystem models across time scales: A spectral analysis of the North American Carbon Program site-level synthesis. Journal of Geophysical Research, 2011, 116, .	3.3	72
779	Long-term climate implications of twenty-first century options for carbon dioxide emissionÂmitigation. Nature Climate Change, 2011, 1, 457-461.	8.1	87
780	Carbon benefits of anthropogenic reactive nitrogen offset by nitrous oxide emissions. Nature Geoscience, 2011, 4, 601-605.	5.4	215
781	Drought and ecosystem carbon cycling. Agricultural and Forest Meteorology, 2011, 151, 765-773.	1.9	446
782	Altitude and temperature dependence of change in the spring vegetation green-up date from 1982 to 2006 in the Qinghai-Xizang Plateau. Agricultural and Forest Meteorology, 2011, 151, 1599-1608.	1.9	442
783	Potential knowledge gain in large-scale simulations of forest carbon fluxes from remotely sensed biomass and height. Forest Ecology and Management, 2011, 261, 515-530.	1.4	12
784	Contribution of climate change and rising CO2 to terrestrial carbon balance in East Asia: A multi-model analysis. Global and Planetary Change, 2011, 75, 133-142.	1.6	84
785	REDD Mitigation. Procedia Environmental Sciences, 2011, 6, 50-59.	1.3	6
786	Importance of crop varieties and management practices: evaluation of a process-based model for simulating CO₂ and H₂O fluxes at five European maize (<i>Zea) Tj ETQq0 0 0 rgBT /Overlock 10 T	1.3	21
787	Controls on winter ecosystem respiration in temperate and boreal ecosystems. Biogeosciences, 2011, 8, 2009-2025.	1.3	42
788	Climate-CH₄ feedback from wetlands and its interaction with the climate-CO₂ feedback. Biogeosciences, 2011, 8, 2137-2157.	1.3	90
789	Source attribution of the changes in atmospheric methane for 2006â€“2008. Atmospheric Chemistry and Physics, 2011, 11, 3689-3700.	1.9	252
790	Variability and budget of CO₂ in Europe: analysis of the CAATER airborne campaigns â€“ Part 1: Observed variability. Atmospheric Chemistry and Physics, 2011, 11, 5655-5672.	1.9	21
791	Importance of fossil fuel emission uncertainties over Europe for CO₂ modeling: model intercomparison. Atmospheric Chemistry and Physics, 2011, 11, 6607-6622.	1.9	87
792	Variability and budget of CO₂ in Europe: analysis of the CAATER airborne campaigns â€“ Part 2: Comparison of CO₂ vertical variability and fluxes between observations and a modeling framework. Atmospheric Chemistry and Physics, 2011, 11, 5673-5684.	1.9	8

#	Article	IF	Citations
793	Forest annual carbon cost: reply. Ecology, 2011, 92, 1998-2002.	1.5	3
794	A European summertime CO2biogenic flux inversion at mesoscale from continuous in situ mixing ratio measurements. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	57
795	Effects of land use change and management on the European cropland carbon balance. Global Change Biology, 2011, 17, 320-338.	4.2	56
796	Changes in satelliteâ€derived vegetation growth trend in temperate and boreal Eurasia from 1982 to 2006. Global Change Biology, 2011, 17, 3228-3239.	4.2	586
797	Response to â€˜The European nitrogen cycle: response to Schulze et al, Global Change Biology (2010) 16, pp. 1451-1469â€™. Global Change Biology, 2011, 17, 2758-2761.	4.2	0
798	Reconstruction and attribution of the carbon sink of European forests between 1950 and 2000. Global Change Biology, 2011, 17, 3274-3292.	4.2	92
799	Modelling forest management within a global vegetation modelâ€"Part 2: Model validation from a tree to a continental scale. Ecological Modelling, 2011, 222, 57-75.	1.2	27
800	Permafrost carbon-climate feedbacks accelerate global warming. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 14769-14774.	3.3	742
801	Plant functional type mapping for earth system models. Geoscientific Model Development, 2011, 4, 993-1010.	1.3	140
802	The carbon balance of Africa: synthesis of recent research studies. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 2038-2057.	1.6	141
803	Spring temperature change and its implication in the change of vegetation growth in North America from 1982 to 2006. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 1240-1245.	3.3	432
804	Evaluation of a Global Vegetation Model using time series of satellite vegetation indices. Geoscientific Model Development, 2011, 4, 1103-1114.	1.3	42
805	Source-receptor relationships for airborne measurements of CO₂, CO and O₃ above Siberia: a cluster-based approach. Atmospheric Chemistry and Physics, 2010, 10, 1671-1687.	1.9	37
806	What can we learn from European continuous atmospheric CO₂ measurements to quantify regional fluxes â€" Part 2: Sensitivity of flux accuracy to inverse setup. Atmospheric Chemistry and Physics, 2010, 10, 3119-3129.	1.9	43
807	What can we learn from European continuous atmospheric CO₂ measurements to quantify regional fluxes â€" Part 1: Potential of the 2001 network. Atmospheric Chemistry and Physics, 2010, 10, 3107-3117.	1.9	40
808	The carbon balance of European croplands: A cross-site comparison of simulation models. Agriculture, Ecosystems and Environment, 2010, 139, 419-453.	2.5	55
809	European CO2 fluxes from atmospheric inversions using regional and global transport models. Climatic Change, 2010, 103, 93-115.	1.7	31
810	Atmospheric inversions for estimating CO2 fluxes: methods and perspectives. Climatic Change, 2010, 103, 69-92.	1.7	113

#	Article	IF	Citations
811	Are ecological gradients in seasonal Q10 of soil respiration explained by climate or by vegetation seasonality?. Soil Biology and Biochemistry, 2010, 42, 1728-1734.	4.2	106
812	Modelling forest management within a global vegetation modelâ€"Part 1: Model structure and general behaviour. Ecological Modelling, 2010, 221, 2458-2474.	1.2	74
813	Can we reconcile atmospheric estimates of the Northern terrestrial carbon sink with land-based accounting?. Current Opinion in Environmental Sustainability, 2010, 2, 225-230.	3.1	73
814	An International Carbon Office to assist policy-based science. Current Opinion in Environmental Sustainability, 2010, 2, 297-300.	3.1	11
815	Interactions of the carbon cycle, human activity, and the climate system: a research portfolio. Current Opinion in Environmental Sustainability, 2010, 2, 301-311.	3.1	62
816	Is the recent build-up of atmospheric CO2 over Europe reproduced by models. Part 2: an overview with the atmospheric mesoscale transport model CHIMERE. Tellus, Series B: Chemical and Physical Meteorology, 2010, 62, 14-25.	0.8	9
817	The European carbon balance. Part 2: croplands. Global Change Biology, 2010, 16, 1409-1428.	4.2	185
818	The European carbon balance. Part 3: forests. Global Change Biology, 2010, 16, 1429-1450.	4.2	247
819	Seven years of recent European net terrestrial carbon dioxide exchange constrained by atmospheric observations. Global Change Biology, 2010, 16, 1317-1337.	4.2	223
820	The European carbon balance. Part 1: fossil fuel emissions. Global Change Biology, 2010, 16, 1395-1408.	4.2	72
821	Identification of vegetation and soil carbon pools out of equilibrium in a process model via eddy covariance and biometric constraints. Global Change Biology, 2010, 16, 2813-2829.	4.2	77
822	Change in winter snow depth and its impacts on vegetation in China. Global Change Biology, 2010, 16, 3004-3013.	4.2	115
823	The European carbon balance. Part 4: integration of carbon and other traceâ€gas fluxes. Global Change Biology, 2010, 16, 1451-1469.	4.2	157
824	The impacts of climate change on water resources and agriculture in China. Nature, 2010, 467, 43-51.	13.7	2,656
825	Recent decline in the global land evapotranspiration trend due to limited moisture supply. Nature, 2010, 467, 951-954.	13.7	1,771
826	Update on CO2 emissions. Nature Geoscience, 2010, 3, 811-812.	5.4	561
827	Reduction of forest soil respiration in response to nitrogen deposition. Nature Geoscience, 2010, 3, 315-322.	5.4	1,254
828	Contrasting response of European forest and grassland energy exchange to heatwaves. Nature Geoscience, 2010, 3, 722-727.	5.4	491

#	Article	IF	Citations
829	Northern Hemisphere atmospheric stilling partly attributed to an increase in surface roughness. Nature Geoscience, 2010, 3, 756-761.	5.4	581
830	Quantifying and isolating stable soil organic carbon using long-term bare fallow experiments. Biogeosciences, 2010, 7, 3839-3850.	1.3	118
831	Climatology-based regional modelling of potential vegetation and average annual long-term runoff for Mesoamerica. Hydrology and Earth System Sciences, 2010, 14, 1801-1817.	1.9	19
832	Mortality as a key driver of the spatial distribution of aboveground biomass in Amazonian forest: results from a dynamic vegetation model. Biogeosciences, 2010, 7, 3027-3039.	1.3	60
833	Autumn temperature and carbon balance of a boreal Scots pine forest in Southern Finland. Biogeosciences, 2010, 7, 163-176.	1.3	57
834	The African contribution to the global climate-carbon cycle feedback of the 21st century. Biogeosciences, 2010, 7, 513-519.	1.3	8
835	Forest annual carbon cost: a globalâ€scale analysis of autotrophic respiration. Ecology, 2010, 91, 652-661.	1.5	171
836	Influence of spring and autumn phenological transitions on forest ecosystem productivity. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 3227-3246.	1.8	751
837	New Insights on the Chemical Composition of the Siberian Air Shed From The Yak-Aerosib Aircraft Campaigns. Bulletin of the American Meteorological Society, 2010, 91, 625-642.	1.7	32
838	Europeanâ€wide simulations of croplands using an improved terrestrial biosphere model: 2. Interannual yields and anomalous CO₂ fluxes in 2003. Journal of Geophysical Research, 2010, 115, .	3.3	12
839	A modelâ€data intercomparison of CO₂ exchange across North America: Results from the North American Carbon Program site synthesis. Journal of Geophysical Research, 2010, 115, .	3.3	247
840	CO₂ surface fluxes at grid point scale estimated from a global 21 year reanalysis of atmospheric measurements. Journal of Geophysical Research, 2010, 115, .	3.3	276
841	Terrestrial Gross Carbon Dioxide Uptake: Global Distribution and Covariation with Climate. Science, 2010, 329, 834-838.	6.0	2,056
842	Spaceborne remote sensing of greenhouse gas concentrations. Comptes Rendus - Geoscience, 2010, 342, 412-424.	0.4	38
843	An attempt to quantify the impact of changes in wetland extent on methane emissions on the seasonal and interannual time scales. Global Biogeochemical Cycles, 2010, 24, .	1.9	177
844	Europeanâ€wide simulations of croplands using an improved terrestrial biosphere model: Phenology and productivity. Journal of Geophysical Research, 2010, 115, .	3.3	33
845	Application of the ORCHIDEE global vegetation model to evaluate biomass and soil carbon stocks of Qinghaiâ€Tibetan grasslands. Global Biogeochemical Cycles, 2010, 24, .	1.9	118
846	Benchmarking coupled climateâ€carbon models against longâ€term atmospheric CO₂ measurements. Global Biogeochemical Cycles, 2010, 24, .	1.9	97

#	Article	IF	Citations
847	New Parameterization of a Global Vegetation Model for Steppe Ecosystem From Southern Siberian In Situ Measurements. Rangeland Ecology and Management, 2010, 63, 51-61.	1.1	2
848	The interannual variability of Africa's ecosystem productivity: a multi-model analysis. Biogeosciences, 2009, 6, 285-295.	1.3	54
849	Mesoscale modelling of the CO₂ interactions between the surface and the atmosphere applied to the April 2007 CERES field experiment. Biogeosciences, 2009, 6, 633-646.	1.3	27
850	Variability and recent trends in the African terrestrial carbon balance. Biogeosciences, 2009, 6, 1935-1948.	1.3	60
851	Structure of the transport uncertainty in mesoscale inversions of CO₂ sources and sinks using ensemble model simulations. Biogeosciences, 2009, 6, 1089-1102.	1.3	82
852	Summer soil moisture regulated by precipitation frequency in China. Environmental Research Letters, 2009, 4, 044012.	2.2	39
853	Large-scale aircraft observations of ultra-fine and fine particle concentrations in the remote Siberian troposphere: New particle formation studies. Atmospheric Environment, 2009, 43, 1302-1309.	1.9	22
854	The carbon balance of terrestrial ecosystems in China. Nature, 2009, 458, 1009-1013.	13.7	1,243
855	Importance of methane and nitrous oxide for Europe's terrestrial greenhouse-gas balance. Nature Geoscience, 2009, 2, 842-850.	5.4	310
856	Trends in the sources and sinks of carbon dioxide. Nature Geoscience, 2009, 2, 831-836.	5.4	1,746
857	Soil Carbon Sequestration or Biofuel Production: New Land-Use Opportunities for Mitigating Climate over Abandoned Soviet Farmlands. Environmental Science & Technology, 2009, 43, 8678-8683.	4.6	29
858	Temporal and amongâ€site variability of inherent water use efficiency at the ecosystem level. Global Biogeochemical Cycles, 2009, 23, .	1.9	422
859	Spatiotemporal patterns of terrestrial carbon cycle during the 20th century. Global Biogeochemical Cycles, 2009, 23, .	1.9	180
860	On the formation of highâ€latitude soil carbon stocks: Effects of cryoturbation and insulation by organic matter in a land surface model. Geophysical Research Letters, 2009, 36, .	1.5	132
861	On the use of ¹⁴CO₂ as a tracer for fossil fuel CO₂: Quantifying uncertainties using an atmospheric transport model. Journal of Geophysical Research, 2009, 114, .	3.3	107
862	Hot European Summers and the Role of Soil Moisture in the Propagation of Mediterranean Drought. Journal of Climate, 2009, 22, 4747-4758.	1.2	180
863	Wildfire smoke in the Siberian Arctic in summer: source characterization and plume evolution from airborne measurements. Atmospheric Chemistry and Physics, 2009, 9, 9315-9327.	1.9	120
864	CO₂ budgeting at the regional scale using a Lagrangian experimental strategy and meso-scale modeling. Biogeosciences, 2009, 6, 113-127.	1.3	12

#	Article	IF	Citations
865	Net carbon dioxide losses of northern ecosystems in response to autumn warming. Nature, 2008, 451, 49-52.	13.7	930
866	Old-growth forests as global carbon sinks. Nature, 2008, 455, 213-215.	13.7	1,399
867	Carbon accumulation in European forests. Nature Geoscience, 2008, 1, 425-429.	5.4	263
868	Evaluation of the terrestrial carbon cycle, future plant geography and climateâ€carbon cycle feedbacks using five Dynamic Global Vegetation Models (DGVMs). Global Change Biology, 2008, 14, 2015-2039.	4.2	1,097
869	Modeled interactive effects of precipitation, temperature, and [CO₂] on ecosystem carbon and water dynamics in different climatic zones. Global Change Biology, 2008, 14, 1986-1999.	4.2	277
870	Modelled effects of precipitation on ecosystem carbon and water dynamics in different climatic zones. Global Change Biology, 2008, 14, 2365-2379.	4.2	112
871	Carbon and water balance of European croplands throughout the 20th century. Global Biogeochemical Cycles, 2008, 22, .	1.9	95
872	Mild winter and spring 2007 over western Europe led to a widespread early vegetation onset. Geophysical Research Letters, 2008, 35, .	1.5	28
873	Carbon sequestration due to the abandonment of agriculture in the former USSR since 1990. Global Biogeochemical Cycles, 2008, 22, .	1.9	105
874	Mesoscale inversion: first results from the CERES campaign with synthetic data. Atmospheric Chemistry and Physics, 2008, 8, 3459-3471.	1.9	91
875	Analyzing the causes and spatial pattern of the European 2003 carbon flux anomaly using seven models. Biogeosciences, 2008, 5, 561-583.	1.3	136
876	The impact of lateral carbon fluxes on the European carbon balance. Biogeosciences, 2008, 5, 1259-1271.	1.3	130
877	Changes in climate and land use have a larger direct impact than rising CO ₂ on global river runoff trends. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 15242-15247.	3.3	504
878	Weak Northern and Strong Tropical Land Carbon Uptake from Vertical Profiles of Atmospheric CO2. Science, 2007, 316, 1732-1735.	6.0	775
879	Mesoscale circulations over complex terrain in the Valencia coastal region, Spain â€“ Part 1: Simulation of diurnal circulation regimes. Atmospheric Chemistry and Physics, 2007, 7, 1835-1849.	1.9	55
880	Mesoscale circulations over complex terrain in the Valencia coastal region, Spain â€“ Part 2: Modeling CO₂ transport using idealized surface fluxes. Atmospheric Chemistry and Physics, 2007, 7, 1851-1868.	1.9	67
881	Comparing atmospheric transport models for future regional inversions over Europe â€“ Part 1: mapping the atmospheric CO₂ signals. Atmospheric Chemistry and Physics, 2007, 7, 3461-3479.	1.9	148
882	Summertime European heat and drought waves induced by wintertime Mediterranean rainfall deficit. Geophysical Research Letters, 2007, 34, .	1.5	289

#	Article	IF	Citations
883	Global and regional drivers of accelerating CO2 emissions. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 10288-10293.	3.3	1,426
884	Evidence for soil water control on carbon and water dynamics in European forests during the extremely dry year: 2003. Agricultural and Forest Meteorology, 2007, 143, 123-145.	1.9	509
885	Contributions to accelerating atmospheric CO ₂ growth from economic activity, carbon intensity, and efficiency of natural sinks. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18866-18870.	3.3	1,770
886	Horizontal displacement of carbon associated with agriculture and its impacts on atmospheric CO2. Global Biogeochemical Cycles, 2007, 21, n/a-n/a.	1.9	61
887	Optimizing a process-based ecosystem model with eddy-covariance flux measurements: A pine forest in southern France. Global Biogeochemical Cycles, 2007, 21, n/a-n/a.	1.9	118
888	Growing season extension and its impact on terrestrial carbon cycle in the Northern Hemisphere over the past 2 decades. Global Biogeochemical Cycles, 2007, 21, .	1.9	598
889	Retrieval of average CO2fluxes by combining in situ CO2measurements and backscatter lidar information. Journal of Geophysical Research, 2007, 112, .	3.3	33
890	Assessing the ability of three land ecosystem models to simulate gross carbon uptake of forests from boreal to Mediterranean climate in Europe. Biogeosciences, 2007, 4, 647-656.	1.3	70
891	Reduction of ecosystem productivity and respiration during the European summer 2003 climate anomaly: a joint flux tower, remote sensing and modelling analysis. Global Change Biology, 2007, 13, 634-651.	4.2	486
892	CO₂ balance of boreal, temperate, and tropical forests derived from a global database. Global Change Biology, 2007, 13, 2509-2537.	4.2	863
893	TransCom 3 inversion intercomparison: Impact of transport model errors on the interannual variability of regional CO2fluxes, 1988-2003. Global Biogeochemical Cycles, 2006, 20, n/a-n/a.	1.9	417
894	Excess radiocarbon constraints on airâ€sea gas exchange and the uptake of CO 2 by the oceans. Geophysical Research Letters, 2006, 33, .	1.5	80
895	Evaluation of SF6, C2Cl4, and CO to approximate fossil fuel CO2in the Northern Hemisphere using a chemistry transport model. Journal of Geophysical Research, 2006, 111, .	3.3	34
896	Effect of climate and CO2changes on the greening of the Northern Hemisphere over the past two decades. Geophysical Research Letters, 2006, 33, .	1.5	207
897	Variations in satellite-derived phenology in China's temperate vegetation. Global Change Biology, 2006, 12, 672-685.	4.2	643
898	Contribution of anthropogenic and natural sources to atmospheric methane variability. Nature, 2006, 443, 439-443.	13.7	935
899	Estimating High Latitude Carbon Fluxes With Inversions Of Atmospheric CO2. Mitigation and Adaptation Strategies for Global Change, 2006, 11, 769-782.	1.0	12
900	Pentaband internal antenna for handset communication devices. Microwave and Optical Technology Letters, 2006, 48, 1509-1512.	0.9	15

#	Article	IF	Citations
901	The CarboEurope Regional Experiment Strategy. Bulletin of the American Meteorological Society, 2006, 87, 1367-1380.	1.7	101
902	Two decades of OH variability as inferred by an inversion of atmospheric transport and chemistry of methyl chloroform. Atmospheric Chemistry and Physics, 2005, 5, 2635-2656.	1.9	140
903	Daily CO₂ flux estimates over Europe from continuous atmospheric measurements: 1, inverse methodology. Atmospheric Chemistry and Physics, 2005, 5, 3173-3186.	1.9	139
904	How uncertainties in future climate change predictions translate into future terrestrial carbon fluxes. Global Change Biology, 2005, 11, 959-970.	4.2	67
905	The carbon budget of terrestrial ecosystems at country-scale â€“ a European case study. Biogeosciences, 2005, 2, 15-26.	1.3	178
906	Temperature sensitivity of decomposition in relation to soil organic matter pools: critique and outlook. Biogeosciences, 2005, 2, 317-321.	1.3	110
907	A dynamic global vegetation model for studies of the coupled atmosphere-biosphere system. Global Biogeochemical Cycles, 2005, 19, .	1.9	1,755
908	Multiple constraints on regional CO2flux variations over land and oceans. Global Biogeochemical Cycles, 2005, 19, .	1.9	154
909	On the role of atmospheric chemistry in the global CO2budget. Geophysical Research Letters, 2005, 32, .	1.5	32
910	Inferring CO2sources and sinks from satellite observations: Method and application to TOVS data. Journal of Geophysical Research, 2005, 110, .	3.3	269
911	Future Expansion Of Agriculture and Pasture Acts to Amplify Atmospheric CO2 Levels in Response to Fossil-Fuel and Land-Use Change Emissions. Climatic Change, 2004, 67, 161-184.	1.7	31
912	Quantifying, Understanding and Managing the Carbon Cycle in the Next Decades. Climatic Change, 2004, 67, 147-160.	1.7	33
913	The Orbiting Carbon Observatory (OCO) mission. Advances in Space Research, 2004, 34, 700-709.	1.2	596
914	Transcom 3 inversion intercomparison: Model mean results for the estimation of seasonal carbon sources and sinks. Global Biogeochemical Cycles, 2004, 18, n/a-n/a.	1.9	312
915	Inverse modeling of CO₂ sources and sinks using satellite data: a synthetic inter-comparison of measurement techniques and their performance as a function of space and time. Atmospheric Chemistry and Physics, 2004, 4, 523-538.	1.9	222
916	Including Croplands in a Global Biosphere Model: Methodology and Evaluation at Specific Sites. Earth Interactions, 2004, 8, 1-25.	0.7	70
917	Coupling the Soil-Vegetation-Atmosphere-Transfer Scheme ORCHIDEE to the agronomy model STICS to study the influence of croplands on the European carbon and water budgets. Agronomy for Sustainable Development, 2004, 24, 397-407.	0.8	74
918	TransCom 3 CO2 inversion intercomparison: 1. Annual mean control results and sensitivity to transport and prior flux information. Tellus, Series B: Chemical and Physical Meteorology, 2003, 55, 555-579.	0.8	235

#	Article	IF	Citations
919	Amplifying effects of land-use change on future atmospheric CO2levels. Global Biogeochemical Cycles, 2003, 17, .	1.9	95
920	Europe's Terrestrial Biosphere Absorbs 7 to 12% of European Anthropogenic CO2 Emissions. Science, 2003, 300, 1538-1542.	6.0	551
921	Influence of transport uncertainty on annual mean and seasonal inversions of atmospheric CO2data. Journal of Geophysical Research, 2002, 107, ACH 5-1.	3.3	90
922	Global response of the terrestrial biosphere to CO2and climate change using a coupled climate-carbon cycle model. Global Biogeochemical Cycles, 2002, 16, 31-1-31-15.	1.9	36
923	On the magnitude of positive feedback between future climate change and the carbon cycle. Geophysical Research Letters, 2002, 29, 43-1-43-4.	1.5	178
924	Quantification of carbon dioxide, methane, nitrous oxide and chloroform emissions over Ireland from atmospheric observations at Mace Head. Tellus, Series B: Chemical and Physical Meteorology, 2002, 54, 41-60.	0.8	37
925	Simulation of atmospheric CO2 over Europe and western Siberia using the regional scale model REMO. Tellus, Series B: Chemical and Physical Meteorology, 2002, 54, 872-894.	0.8	38
926	Three years of trace gas observations over the EuroSiberian domain derived from aircraft sampling - a concerted action. Tellus, Series B: Chemical and Physical Meteorology, 2002, 54, 696-712.	0.8	46
927	Three years of aircraft-based trace gas measurements over the Fyodorovskoye southern taiga forest, 300 km north-west of Moscow. Tellus, Series B: Chemical and Physical Meteorology, 2002, 54, 713-734.	0.8	25
928	Towards robust regional estimates of CO2 sources and sinks using atmospheric transport models. Nature, 2002, 415, 626-630.	13.7	1,157
929	Positive feedback between future climate change and the carbon cycle. Geophysical Research Letters, 2001, 28, 1543-1546.	1.5	287
930	Recent patterns and mechanisms of carbon exchange by terrestrial ecosystems. Nature, 2001, 414, 169-172.	13.7	1,162
931	Consistent Land- and Atmosphere-Based U.S. Carbon Sink Estimates. Science, 2001, 292, 2316-2320.	6.0	746
932	A global prognostic scheme of leaf onset using satellite data. Global Change Biology, 2000, 6, 709-725.	4.2	251
933	Holocene Climate Variability in Antarctica Based on 11 Ice-Core Isotopic Records. Quaternary Research, 2000, 54, 348-358.	1.0	291
934	Regional Changes in Carbon Dioxide Fluxes of Land and Oceans Since 1980. Science, 2000, 290, 1342-1346.	6.0	680
935	European greenhouse gas emissions estimated from continuous atmospheric measurements and radon 222 at Mace Head, Ireland. Journal of Geophysical Research, 2000, 105, 1351-1366.	3.3	107
936	A global calculation of the Î´13C of soil respired carbon: Implications for the biospheric uptake of anthropogenic CO2. Global Biogeochemical Cycles, 1999, 13, 519-530.	1.9	44

#	Article	IF	Citations
937	Experimental determination of the diffusion rate of deuterated water vapor in ice and application to the stable isotopes smoothing of ice cores. Earth and Planetary Science Letters, 1998, 158, 81-90.	1.8	21
938	Atmospheric CO2 concentration variations recorded at Mace Head, Ireland, from 1992 to 1994. Physics and Chemistry of the Earth, 1996, 21, 477-481.	0.3	36
939	Influence of two atmospheric transport models on inferring sources and sinks of atmospheric CO2. Tellus, Series B: Chemical and Physical Meteorology, 1996, 48, 568-582.	0.8	12
940	Partitioning of ocean and land uptake of CO2as inferred by Î´13C measurements from the NOAA Climate Monitoring and Diagnostics Laboratory Global Air Sampling Network. Journal of Geophysical Research, 1995, 100, 5051.	3.3	315
941	A Large Northern Hemisphere Terrestrial CO2 Sink Indicated by the 13C/12C Ratio of Atmospheric CO2. Science, 1995, 269, 1098-1102.	6.0	752
942	A high-resolution record of atmospheric CO2 content from carbon isotopes in pet. Nature, 1994, 367, 153-156.	13.7	153
943	Climate in the Pleistocene. Nature, 1994, 371, 111-112.	13.7	13
944	Holocene temperature variations inferred from Antarctic ice cores. Annals of Glaciology, 1994, 20, 427-436.	2.8	16
945	Evidence for an early Holocene climatic optimum in the Antarctic deep ice-core record. Climate Dynamics, 1992, 6, 169-177.	1.7	69
946	Use, calibrationÂand verification of agroecological models for boreal environments: A review. , 0, , .		2