

# Markus Reichstein

## List of Publications by Year in Descending Order

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

327  
papers

45,515  
citations

96  
h-index

211  
g-index

365  
ext. papers

53,651  
ext. citations

9.2  
avg, IF

7.16  
L-index

#	Paper	IF	Citations
327	Contrasting biophysical and societal impacts of hydro-meteorological extremes. <i>Environmental Research Letters</i> , <b>2022</b> , 17, 014044	6.2	1
326	On the potential of Sentinel-2 for estimating Gross Primary Production. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2022</b> , 1-1	8.1	1
325	Towards hybrid modeling of the global hydrological cycle. <i>Hydrology and Earth System Sciences</i> , <b>2022</b> , 26, 1579-1614	5.5	2
324	Invited perspectives: A research agenda towards disaster risk management pathways in multi-(hazard-)risk assessment. <i>Natural Hazards and Earth System Sciences</i> , <b>2022</b> , 22, 1487-1497	3.9	0
323	Heatwave breaks down the linearity between sun-induced fluorescence and gross primary production.. <i>New Phytologist</i> , <b>2021</b> ,	9.8	6
322	Climatic and soil factors explain the two-dimensional spectrum of global plant trait variation.. <i>Nature Ecology and Evolution</i> , <b>2021</b> ,	12.3	6
321	Time-Scale Dependent Relations Between Earth Observation Based Proxies of Vegetation Productivity. <i>Geophysical Research Letters</i> , <b>2021</b> , 48, e2021GL093285	4.9	0
320	Machine-learning-based evidence and attribution mapping of 100,000 climate impact studies. <i>Nature Climate Change</i> , <b>2021</b> , 11, 966-972	21.4	14
319	Vulnerability of European ecosystems to two compound dry and hot summers in 2018 and 2019. <i>Earth System Dynamics</i> , <b>2021</b> , 12, 1015-1035	4.8	6
318	Where Are Global Vegetation Greening and Browning Trends Significant?. <i>Geophysical Research Letters</i> , <b>2021</b> , 48, e2020GL091496	4.9	20
317	Soil moisture-atmosphere feedback dominates land carbon uptake variability. <i>Nature</i> , <b>2021</b> , 592, 65-69	50.4	61
316	More floods, fires and cyclones - plan for domino effects on sustainability goals. <i>Nature</i> , <b>2021</b> , 592, 347-349	34.4	11
315	Functional convergence of biosphere-atmosphere interactions in response to meteorological conditions. <i>Biogeosciences</i> , <b>2021</b> , 18, 2379-2404	4.6	2
314	senSCOPE: Modeling mixed canopies combining green and brown senesced leaves. Evaluation in a Mediterranean Grassland. <i>Remote Sensing of Environment</i> , <b>2021</b> , 257, 112352	13.2	7
313	How Nitrogen and Phosphorus Availability Change Water Use Efficiency in a Mediterranean Savanna Ecosystem. <i>Journal of Geophysical Research G: Biogeosciences</i> , <b>2021</b> , 126, e2020JG006005	3.7	1
312	Revisiting Global Vegetation Controls Using Multi-Layer Soil Moisture. <i>Geophysical Research Letters</i> , <b>2021</b> , 48, e2021GL092856	4.9	3
311	A unified vegetation index for quantifying the terrestrial biosphere. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	35

310	Increasing impact of warm droughts on northern ecosystem productivity over recent decades. <i>Nature Climate Change</i> , <b>2021</b> , 11, 772-779	21.4	14
309	The three major axes of terrestrial ecosystem function. <i>Nature</i> , <b>2021</b> , 598, 468-472	50.4	8
308	A Data-Driven Approach to Partitioning Net Ecosystem Exchange Using a Deep State Space Model. <i>IEEE Access</i> , <b>2021</b> , 9, 107873-107883	3.5	0
307	Vegetation modulates the impact of climate extremes on gross primary production. <i>Biogeosciences</i> , <b>2021</b> , 18, 39-53	4.6	10
306	Direct and seasonal legacy effects of the 2018 heat wave and drought on European ecosystem productivity. <i>Science Advances</i> , <b>2020</b> , 6, eaba2724	14.3	85
305	Partitioning net carbon dioxide fluxes into photosynthesis and respiration using neural networks. <i>Global Change Biology</i> , <b>2020</b> , 26, 5235-5253	11.4	18
304	Large-scale biospheric drought response intensifies linearly with drought duration in arid regions. <i>Biogeosciences</i> , <b>2020</b> , 17, 2647-2656	4.6	17
303	Accounting for multiple testing in the analysis of spatio-temporal environmental data. <i>Environmental and Ecological Statistics</i> , <b>2020</b> , 27, 293-318	2.2	7
302	Towards a global understanding of vegetation climate dynamics at multiple timescales. <i>Biogeosciences</i> , <b>2020</b> , 17, 945-962	4.6	17
301	Critical Soil Moisture Derived From Satellite Observations Over Europe. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2020</b> , 125, e2019JD031672	4.4	23
300	Combination of energy limitation and sorption capacity explains 14C depth gradients. <i>Soil Biology and Biochemistry</i> , <b>2020</b> , 148, 107912	7.5	2
299	The Low Dimensionality of Development. <i>Social Indicators Research</i> , <b>2020</b> , 150, 999-1020	2.7	5
298	Nutrients and water availability constrain the seasonality of vegetation activity in a Mediterranean ecosystem. <i>Global Change Biology</i> , <b>2020</b> , 26, 4379-4400	11.4	11
297	Scaling carbon fluxes from eddy covariance sites to globe: synthesis and evaluation of the FLUXCOM approach. <i>Biogeosciences</i> , <b>2020</b> , 17, 1343-1365	4.6	134
296	Discovering Differential Equations from Earth Observation Data <b>2020</b> ,		1
295	Summarizing the state of the terrestrial biosphere in few dimensions. <i>Biogeosciences</i> , <b>2020</b> , 17, 2397-2424	4.6	9
294	Ecosystem physio-phenology revealed using circular statistics. <i>Biogeosciences</i> , <b>2020</b> , 17, 3991-4006	4.6	2
293	Apparent ecosystem carbon turnover time: uncertainties and robust features. <i>Earth System Science Data</i> , <b>2020</b> , 12, 2517-2536	10.5	6

292	ADVANCING DEEP LEARNING FOR EARTH SCIENCES: FROM HYBRID MODELING TO INTERPRETABILITY <b>2020</b> ,		2
291	Mesophyll conductance in land surface models: effects on photosynthesis and transpiration. <i>Plant Journal</i> , <b>2020</b> , 101, 858-873	6.9	15
290	Advancing the Understanding of Adaptive Capacity of Social-Ecological Systems to Absorb Climate Extremes. <i>Earth's Future</i> , <b>2020</b> , 8, e2019EF001221	7.9	11
289	TRY plant trait database - enhanced coverage and open access. <i>Global Change Biology</i> , <b>2020</b> , 26, 119-188	11.4	399
288	Outlook: Challenges for societal resilience under climate extremes <b>2020</b> , 341-353		2
287	Ecosystem transpiration and evaporation: Insights from three water flux partitioning methods across FLUXNET sites. <i>Global Change Biology</i> , <b>2020</b> , 26, 6916-6930	11.4	31
286	The FLUXNET2015 dataset and the ONEFlux processing pipeline for eddy covariance data. <i>Scientific Data</i> , <b>2020</b> , 7, 225	8.2	256
285	Constraining Uncertainty in Projected Gross Primary Production With Machine Learning. <i>Journal of Geophysical Research G: Biogeosciences</i> , <b>2020</b> , 125, e2019JG005619	3.7	10
284	The COVID-19 lockdowns: a window into the Earth System. <i>Nature Reviews Earth &amp; Environment</i> , <b>2020</b> , 1, 470-481	30.2	90
283	Persistence of soil organic carbon caused by functional complexity. <i>Nature Geoscience</i> , <b>2020</b> , 13, 529-534	18.3	131
282	Impacts of extreme summers on European ecosystems: a comparative analysis of 2003, 2010 and 2018. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2020</b> , 375, 20190507	5.8	23
281	Drought and heatwave impacts on semi-arid ecosystems' carbon fluxes along a precipitation gradient. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2020</b> , 375, 20190519	5.8	12
280	Asymmetric responses of ecosystem productivity to rainfall anomalies vary inversely with mean annual rainfall over the conterminous United States. <i>Global Change Biology</i> , <b>2020</b> , 26, 6959-6973	11.4	9
279	Impact of temporal precipitation variability on ecosystem productivity. <i>Wiley Interdisciplinary Reviews: Water</i> , <b>2020</b> , 7, e1481	5.7	5
278	Earth system data cubes unravel global multivariate dynamics. <i>Earth System Dynamics</i> , <b>2020</b> , 11, 201-234	4.8	17
277	Inferring plant functional diversity from space: the potential of Sentinel-2. <i>Remote Sensing of Environment</i> , <b>2019</b> , 233, 111368	13.2	31
276	Reviews and syntheses: Turning the challenges of partitioning ecosystem evaporation and transpiration into opportunities. <i>Biogeosciences</i> , <b>2019</b> , 16, 3747-3775	4.6	75
275	Inferring causation from time series in Earth system sciences. <i>Nature Communications</i> , <b>2019</b> , 10, 2553	17.4	153

274	The FLUXCOM ensemble of global land-atmosphere energy fluxes. <i>Scientific Data</i> , <b>2019</b> , 6, 74	8.2	152
273	Integrating Aquatic and Terrestrial Perspectives to Improve Insights Into Organic Matter Cycling at the Landscape Scale. <i>Frontiers in Earth Science</i> , <b>2019</b> , 7,	3.5	12
272	N : P stoichiometry and habitat effects on Mediterranean savanna seasonal root dynamics. <i>Biogeosciences</i> , <b>2019</b> , 16, 1883-1901	4.6	9
271	Memory effects of climate and vegetation affecting net ecosystem CO2 fluxes in global forests. <i>PLoS ONE</i> , <b>2019</b> , 14, e0211510	3.7	18
270	Widespread inhibition of daytime ecosystem respiration. <i>Nature Ecology and Evolution</i> , <b>2019</b> , 3, 407-415	12.3	60
269	Aspects of Forest Biomass in the Earth System: Its Role and Major Unknowns. <i>Surveys in Geophysics</i> , <b>2019</b> , 40, 693-707	7.6	21
268	Carbon-water flux coupling under progressive drought. <i>Biogeosciences</i> , <b>2019</b> , 16, 2557-2572	4.6	14
267	Earth system data cubes unravel global multivariate dynamics <b>2019</b> ,		2
266	Identifying Dynamic Memory Effects on Vegetation State Using Recurrent Neural Networks. <i>Frontiers in Big Data</i> , <b>2019</b> , 2, 31	2.8	7
265	A perspective on Gaussian processes for Earth observation. <i>National Science Review</i> , <b>2019</b> , 6, 616-618	10.8	28
264	Nonlinear Causal Link Estimation Under Hidden Confounding with an Application to Time Series Anomaly Detection. <i>Lecture Notes in Computer Science</i> , <b>2019</b> , 261-273	0.9	1
263	Predicting Landscapes from Environmental Conditions Using Generative Networks. <i>Lecture Notes in Computer Science</i> , <b>2019</b> , 203-217	0.9	0
262	Effects of mesophyll conductance on vegetation responses to elevated CO concentrations in a land surface model. <i>Global Change Biology</i> , <b>2019</b> , 25, 1820-1838	11.4	17
261	Deep learning and process understanding for data-driven Earth system science. <i>Nature</i> , <b>2019</b> , 566, 195-204	20.4	974
260	Nitrogen and Phosphorus effect on Sun-Induced Fluorescence and Gross Primary Productivity in Mediterranean Grassland. <i>Remote Sensing</i> , <b>2019</b> , 11, 2562	5	13
259	Physics-Constrained Machine Learning of Evapotranspiration. <i>Geophysical Research Letters</i> , <b>2019</b> , 46, 14496-14507	4.9	48
258	Estimation of forest aboveground biomass and uncertainties by integration of field measurements, airborne LiDAR, and SAR and optical satellite data in Mexico. <i>Carbon Balance and Management</i> , <b>2018</b> , 13, 5	3.6	46
257	Inter-annual variability of net and gross ecosystem carbon fluxes: A review. <i>Agricultural and Forest Meteorology</i> , <b>2018</b> , 249, 520-533	5.8	165

256	Towards physiologically meaningful water-use efficiency estimates from eddy covariance data. <i>Global Change Biology</i> , <b>2018</b> , 24, 694-710	11.4	72
255	Drivers of spatio-temporal variability of carbon dioxide and energy fluxes in a Mediterranean savanna ecosystem. <i>Agricultural and Forest Meteorology</i> , <b>2018</b> , 262, 258-278	5.8	31
254	Water-stress-induced breakdown of carbon-water relations: indicators from diurnal FLUXNET patterns. <i>Biogeosciences</i> , <b>2018</b> , 15, 2433-2447	4.6	15
253	Basic and extensible post-processing of eddy covariance flux data with REdDyProc. <i>Biogeosciences</i> , <b>2018</b> , 15, 5015-5030	4.6	263
252	Using Near-Infrared-Enabled Digital Repeat Photography to Track Structural and Physiological Phenology in Mediterranean TreeGrass Ecosystems. <i>Remote Sensing</i> , <b>2018</b> , 10, 1293	5	43
251	Drought, Heat, and the Carbon Cycle: a Review. <i>Current Climate Change Reports</i> , <b>2018</b> , 4, 266-286	9	73
250	dimRed and coRanking - Unifying Dimensionality Reduction in R. <i>R Journal</i> , <b>2018</b> , 10, 342	3.3	19
249	Upscaled diurnal cycles of land-atmosphere fluxes: a new global half-hourly data product. <i>Earth System Science Data</i> , <b>2018</b> , 10, 1327-1365	10.5	52
248	Modelling Landsurface Time-Series with Recurrent Neural Nets <b>2018</b> ,		5
247	<b>2018</b> ,		3
246	Coupling Water and Carbon Fluxes to Constrain Estimates of Transpiration: The TEA Algorithm. <i>Journal of Geophysical Research G: Biogeosciences</i> , <b>2018</b> , 123, 3617-3632	3.7	21
245	A methodology to derive global maps of leaf traits using remote sensing and climate data. <i>Remote Sensing of Environment</i> , <b>2018</b> , 218, 69-88	13.2	58
244	Quantifying the effect of forest age in annual net forest carbon balance. <i>Environmental Research Letters</i> , <b>2018</b> , 13, 124018	6.2	41
243	Contrasting biosphere responses to hydrometeorological extremes: revisiting the 2010 western Russian heatwave. <i>Biogeosciences</i> , <b>2018</b> , 15, 6067-6085	4.6	34
242	Potential of Multi-Temporal ALOS-2 PALSAR-2 ScanSAR Data for Vegetation Height Estimation in Tropical Forests of Mexico. <i>Remote Sensing</i> , <b>2018</b> , 10, 1277	5	10
241	Partitioning Eddy Covariance Water Flux Components Using Physiological and Micrometeorological Approaches. <i>Journal of Geophysical Research G: Biogeosciences</i> , <b>2018</b> , 123, 3353-3370	3.7	28
240	Following the Turnover of Soil Bioavailable Phosphate in Mediterranean Savanna by Oxygen Stable Isotopes. <i>Journal of Geophysical Research G: Biogeosciences</i> , <b>2018</b> , 123, 1850-1862	3.7	12
239	Warm Winter, Wet Spring, and an Extreme Response in Ecosystem Functioning on the Iberian Peninsula. <i>Bulletin of the American Meteorological Society</i> , <b>2018</b> , 99, S80-S85	6.1	4

238	Impacts of droughts and extreme-temperature events on gross primary production and ecosystem respiration: a systematic assessment across ecosystems and climate zones. <i>Biogeosciences</i> , <b>2018</b> , 15, 1293-1318	4.6	79
237	Stand age and species richness dampen interannual variation of ecosystem-level photosynthetic capacity. <i>Nature Ecology and Evolution</i> , <b>2017</b> , 1, 48	12.3	60
236	Compensatory water effects link yearly global land CO sink changes to temperature. <i>Nature</i> , <b>2017</b> , 541, 516-520	50.4	341
235	Evaluation of eddy covariance latent heat fluxes with independent lysimeter and sapflow estimates in a Mediterranean savannah ecosystem. <i>Agricultural and Forest Meteorology</i> , <b>2017</b> , 236, 87-99	5.8	48
234	Plant functional traits and canopy structure control the relationship between photosynthetic CO uptake and far-red sun-induced fluorescence in a Mediterranean grassland under different nutrient availability. <i>New Phytologist</i> , <b>2017</b> , 214, 1078-1091	9.8	116
233	Coverage of high biomass forests by the ESA BIOMASS mission under defense restrictions. <i>Remote Sensing of Environment</i> , <b>2017</b> , 196, 154-162	13.2	53
232	Global distribution of groundwater-vegetation spatial covariation. <i>Geophysical Research Letters</i> , <b>2017</b> , 44, 4134-4142	4.9	46
231	Fluxes all of the time? A primer on the temporal representativeness of FLUXNET. <i>Journal of Geophysical Research G: Biogeosciences</i> , <b>2017</b> , 122, 289-307	3.7	76
230	Adaptation of microbial resource allocation affects modelled long term soil organic matter and nutrient cycling. <i>Soil Biology and Biochemistry</i> , <b>2017</b> , 115, 322-336	7.5	19
229	The importance of radiation for semiempirical water-use efficiency models. <i>Biogeosciences</i> , <b>2017</b> , 14, 3015-3026	4.6	16
228	Refining multi-model projections of temperature extremes by evaluation against land-atmosphere coupling diagnostics. <i>Earth System Dynamics</i> , <b>2017</b> , 8, 387-403	4.8	38
227	Multivariate anomaly detection for Earth observations: a comparison of algorithms and feature extraction techniques. <i>Earth System Dynamics</i> , <b>2017</b> , 8, 677-696	4.8	19
226	Reviews and syntheses: An empirical spatiotemporal description of the global surface-atmosphere carbon fluxes: opportunities and data limitations. <i>Biogeosciences</i> , <b>2017</b> , 14, 3685-3703	4.6	37
225	Have precipitation extremes and annual totals been increasing in the world's dry regions over the last 60 years?. <i>Hydrology and Earth System Sciences</i> , <b>2017</b> , 21, 441-458	5.5	17
224	Contrasting and interacting changes in simulated spring and summer carbon cycle extremes in European ecosystems. <i>Environmental Research Letters</i> , <b>2017</b> , 12, 075006	6.2	26
223	How Much CO <sub>2</sub> Is Taken Up by the European Terrestrial Biosphere?. <i>Bulletin of the American Meteorological Society</i> , <b>2017</b> , 98, 665-671	6.1	23
222	The response of ecosystem water-use efficiency to rising atmospheric CO concentrations: sensitivity and large-scale biogeochemical implications. <i>New Phytologist</i> , <b>2017</b> , 213, 1654-1666	9.8	57
221	Enhanced seasonal CO <sub>2</sub> exchange caused by amplified plant productivity in northern ecosystems. <i>Science</i> , <b>2016</b> , 351, 696-9	33.3	240

220	Predicting carbon dioxide and energy fluxes across global FLUXNET sites with regression algorithms. <i>Biogeosciences</i> , <b>2016</b> , 13, 4291-4313	4.6	291
219	Refining multi-model projections of temperature extremes by evaluation against land-atmosphere coupling diagnostics <b>2016</b> ,		2
218	Multivariate Anomaly Detection for Earth Observations: A Comparison of Algorithms and Feature Extraction Techniques <b>2016</b> ,		1
217	Improved Multi-Sensor Satellite-Based Aboveground Biomass Estimation by Selecting Temporally Stable Forest Inventory Plots Using NDVI Time Series. <i>Forests</i> , <b>2016</b> , 7, 169	2.8	9
216	A novel bias correction methodology for climate impact simulations. <i>Earth System Dynamics</i> , <b>2016</b> , 7, 71-88	4.8	56
215	Evaluating the convergence between eddy-covariance and biometric methods for assessing carbon budgets of forests. <i>Nature Communications</i> , <b>2016</b> , 7, 13717	17.4	64
214	Potential and limitations of inferring ecosystem photosynthetic capacity from leaf functional traits. <i>Ecology and Evolution</i> , <b>2016</b> , 6, 7352-7366	2.8	24
213	The imprint of plants on ecosystem functioning: A data-driven approach. <i>International Journal of Applied Earth Observation and Geoinformation</i> , <b>2015</b> , 43, 119-131	7.3	31
212	Contribution of sorption, DOC transport and microbial interactions to the 14C age of a soil organic carbon profile: Insights from a calibrated process model. <i>Soil Biology and Biochemistry</i> , <b>2015</b> , 88, 390-402	7.5	91
211	Codominant water control on global interannual variability and trends in land surface phenology and greenness. <i>Global Change Biology</i> , <b>2015</b> , 21, 3414-35	11.4	121
210	Effects of climate extremes on the terrestrial carbon cycle: concepts, processes and potential future impacts. <i>Global Change Biology</i> , <b>2015</b> , 21, 2861-80	11.4	454
209	Oxygen isotope ratios of plant available phosphate in lowland tropical forest soils. <i>Soil Biology and Biochemistry</i> , <b>2015</b> , 88, 354-361	7.5	24
208	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'. <i>Nature Climate Change</i> , <b>2015</b> , 5, 960-961	21.4	2
207	Ranking drivers of global carbon and energy fluxes over land <b>2015</b> ,		2
206	Influence of physiological phenology on the seasonal pattern of ecosystem respiration in deciduous forests. <i>Global Change Biology</i> , <b>2015</b> , 21, 363-76	11.4	41
205	The significance of land-atmosphere interactions in the Earth system—LEAPS achievements and perspectives. <i>Anthropocene</i> , <b>2015</b> , 12, 69-84	3.9	22
204	BHMPF: a hierarchical Bayesian approach to gap-filling and trait prediction for macroecology and functional biogeography. <i>Global Ecology and Biogeography</i> , <b>2015</b> , 24, 1510-1521	6.1	83
203	Effect of spatial sampling from European flux towers for estimating carbon and water fluxes with artificial neural networks. <i>Journal of Geophysical Research G: Biogeosciences</i> , <b>2015</b> , 120, 1941-1957	3.7	51



202	Global spatiotemporal distribution of soil respiration modeled using a global database. <i>Biogeosciences</i> , <b>2015</b> , 12, 4121-4132	4.6	126
201	Sun-induced chlorophyll fluorescence and photochemical reflectance index improve remote-sensing gross primary production estimates under varying nutrient availability in a typical Mediterranean savanna ecosystem. <i>Biogeosciences</i> , <b>2015</b> , 12, 6351-6367	4.6	49
200	Preface: Climate extremes and biogeochemical cycles in the terrestrial biosphere: impacts and feedbacks across scales. <i>Biogeosciences</i> , <b>2015</b> , 12, 4827-4830	4.6	5
199	Carbon cycle. The dominant role of semi-arid ecosystems in the trend and variability of the land CO <sub>2</sub> sink. <i>Science</i> , <b>2015</b> , 348, 895-9	33.3	684
198	Plant-Environment Interactions Across Multiple Scales <b>2014</b> , 1-27		1
197	Impact of large-scale climate extremes on biospheric carbon fluxes: An intercomparison based on MsTMIP data. <i>Global Biogeochemical Cycles</i> , <b>2014</b> , 28, 585-600	5.9	112
196	Linking plant and ecosystem functional biogeography. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 13697-702	11.5	188
195	Global assessment of trends in wetting and drying over land. <i>Nature Geoscience</i> , <b>2014</b> , 7, 716-721	18.3	448
194	Global covariation of carbon turnover times with climate in terrestrial ecosystems. <i>Nature</i> , <b>2014</b> , 514, 213-7	50.4	446
193	The use of radiocarbon to constrain current and future soil organic matter turnover and transport in a temperate forest. <i>Journal of Geophysical Research G: Biogeosciences</i> , <b>2014</b> , 119, 372-391	3.7	22
192	Recent shift in Eurasian boreal forest greening response may be associated with warmer and drier summers. <i>Geophysical Research Letters</i> , <b>2014</b> , 41, 1995-2002	4.9	77
191	Carbon cycle extremes during the 21st century in CMIP5 models: Future evolution and attribution to climatic drivers. <i>Geophysical Research Letters</i> , <b>2014</b> , 41, 8853-8861	4.9	32
190	Bayesian calibration of a soil organic carbon model using <sup>14</sup> C measurements of soil organic carbon and heterotrophic respiration as joint constraints. <i>Biogeosciences</i> , <b>2014</b> , 11, 2147-2168	4.6	24
189	Extreme events in gross primary production: a characterization across continents. <i>Biogeosciences</i> , <b>2014</b> , 11, 2909-2924	4.6	66
188	Current systematic carbon-cycle observations and the need for implementing a policy-relevant carbon observing system. <i>Biogeosciences</i> , <b>2014</b> , 11, 3547-3602	4.6	136
187	Climate-mediated spatiotemporal variability in terrestrial productivity across Europe. <i>Biogeosciences</i> , <b>2014</b> , 11, 3057-3068	4.6	8
186	Reconciling 14C and minirhizotron-based estimates of fine-root turnover with survival functions. <i>Journal of Plant Nutrition and Soil Science</i> , <b>2014</b> , 177, 287-296	2.3	4
185	Harmonized European Long-Term Climate Data for Assessing the Effect of Changing Temporal Variability on Land-Atmosphere CO <sub>2</sub> Fluxes. <i>Journal of Climate</i> , <b>2014</b> , 27, 4815-4834	4.4	36

184	Climate-biosphere interactions in a more extreme world. <i>New Phytologist</i> , <b>2014</b> , 202, 356-359	9.8	45
183	Nutrient availability as the key regulator of global forest carbon balance. <i>Nature Climate Change</i> , <b>2014</b> , 4, 471-476	21.4	269
182	A few extreme events dominate global interannual variability in gross primary production. <i>Environmental Research Letters</i> , <b>2014</b> , 9, 035001	6.2	134
181	Plant-Environment Interactions Across Multiple Scales <b>2014</b> , 1-23		1
180	Random errors in carbon and water vapor fluxes assessed with Gaussian Processes. <i>Agricultural and Forest Meteorology</i> , <b>2013</b> , 178-179, 161-172	5.8	15
179	Impact of Climate Variability and Extremes on the Carbon Cycle of the Mediterranean Region. <i>Advances in Global Change Research</i> , <b>2013</b> , 31-47	1.2	2
178	Climate extremes and the carbon cycle. <i>Nature</i> , <b>2013</b> , 500, 287-95	50.4	974
177	Detection and attribution of large spatiotemporal extreme events in Earth observation data. <i>Ecological Informatics</i> , <b>2013</b> , 15, 66-73	4.2	80
176	A data-driven analysis of energy balance closure across FLUXNET research sites: The role of landscape scale heterogeneity. <i>Agricultural and Forest Meteorology</i> , <b>2013</b> , 171-172, 137-152	5.8	342
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