Natalie M Mahowald

List of Publications by Year in Descending Order

236 papers	27,888 citations	82 h-index	165 g-index
256 ext. papers	31,746 ext. citations	7.6 avg, IF	6.77 L-index

#	Paper	IF	Citations
236	Future PM2.5 emissions from metal production to meet renewable energy demand. *Environmental Research Letters*, **2022**, 17, 044043	6.2	
235	Improved Parameterization for the Size Distribution of Emitted Dust Aerosols Reduces Model Underestimation of Super Coarse Dust. *Geophysical Research Letters*, **2022**, 49,	4.9	0
234	COVID-19 impact on an academic Institution's greenhouse gas inventory: The case of Cornell University. *Journal of Cleaner Production*, **2022**, 363, 132440	10.3	0
233	Importance of Uncertainties in the Spatial Distribution of Preindustrial Wildfires for Estimating Aerosol Radiative Forcing. *Geophysical Research Letters*, **2021**, 48, e2020GL089758	4.9	
232	Constraining the atmospheric limb of the plastic cycle. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	62
231	Improved representation of the global dust cycle using observational constraints on dust properties and abundance. *Atmospheric Chemistry and Physics*, **2021**, 21, 8127-8167	6.8	19
230	Contribution of the world's main dust source regions to the global cycle of desert dust. *Atmospheric Chemistry and Physics*, **2021**, 21, 8169-8193	6.8	31
229	Short-term impacts of 2017 western North American wildfires on meteorology, the atmosphere energy budget, and premature mortality. *Environmental Research Letters*, **2021**, 16, 064065	6.2	1
228	The EMIT mission information yield for mineral dust radiative forcing. *Remote Sensing of Environment*, **2021**, 258, 112380	13.2	4
227	Anthropogenic Perturbations to the Atmospheric Molybdenum Cycle. *Global Biogeochemical Cycles*, **2021**, 35, e2020GB006787	5.9	1
226	Quantifying the range of the dust direct radiative effect due to source mineralogy uncertainty. *Atmospheric Chemistry and Physics*, **2021**, 21, 3973-4005	6.8	11
225	Changing atmospheric acidity as a modulator of nutrient deposition and ocean biogeochemistry. *Science Advances*, **2021**, 7,	14.3	11
224	Earth, Wind, Fire, and Pollution: Aerosol Nutrient Sources and Impacts on Ocean Biogeochemistry. *Annual Review of Marine Science*, **2021**,	15.4	7
223	Natural atmospheric deposition of molybdenum: a global model and implications for tropical forests. *Biogeochemistry*, **2020**, 149, 159-174	3.8	5
222	Tropical Rains Controlling Deposition of Saharan Dust Across the North Atlantic Ocean. *Geophysical Research Letters*, **2020**, 47, e2019GL086867	4.9	11
221	Impact of Changes to the Atmospheric Soluble Iron Deposition Flux on Ocean Biogeochemical Cycles in the Anthropocene. *Global Biogeochemical Cycles*, **2020**, 34, e2019GB006448	5.9	33
220	What goes up must come down: impacts of deposition in a sulfate geoengineering scenario. *Environmental Research Letters*, **2020**, 15, 094063	6.2	5

219	AWESOME OCIM: A simple, flexible, and powerful tool for modeling elemental cycling in the oceans. *Chemical Geology*, **2020**, 533, 119403	4.2	6
218	A Comparison of the CMIP6 midHolocene and lig127k Simulations in CESM2. *Paleoceanography and Paleoclimatology*, **2020**, 35, e2020PA003957	3.3	4
217	Ejection of Dust From the Ocean as a Potential Source of Marine Ice Nucleating Particles. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2020JD033073	4.4	7
216	Recent (1980 to 2015) Trends and Variability in Daily-to-Interannual Soluble Iron Deposition from Dust, Fire, and Anthropogenic Sources. *Geophysical Research Letters*, **2020**, 47, e2020GL089688	4.9	10
215	A Mineralogy-Based Anthropogenic Combustion-Iron Emission Inventory. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2019JD032114	4.4	11
214	Paleodust Insights into Dust Impacts on Climate. *Journal of Climate*, **2019**, 32, 7897-7913	4.4	15
213	Climate-driven oscillation of phosphorus and iron limitation in the North Pacific Subtropical Gyre. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 12720-12728	11.5	26
212	Tracing and constraining anthropogenic aerosol iron fluxes to the North Atlantic Ocean using iron isotopes. *Nature Communications*, **2019**, 10, 2628	17.4	43
211	Major Impact of Dust Deposition on the Productivity of the Arabian Sea. *Geophysical Research Letters*, **2019**, 46, 6736-6744	4.9	23
210	Pyrogenic iron: The missing link to high iron solubility in aerosols. *Science Advances*, **2019**, 5, eaau7671	14.3	88
209	Glacially sourced dust as a potentially significant source of ice nucleating particles. *Nature Geoscience*, **2019**, 12, 253-258	18.3	54
208	African biomass burning is a substantial source of phosphorus deposition to the Amazon, Tropical Atlantic Ocean, and Southern Ocean. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 16216-16221	11.5	59
207	Evaluation of global simulations of aerosol particle and cloud condensation nuclei number, with implications for cloud droplet formation. *Atmospheric Chemistry and Physics*, **2019**, 19, 8591-8617	6.8	31
206	Radiative Forcing of Climate: The Historical Evolution of the Radiative Forcing Concept, the Forcing Agents and their Quantification, and Applications. *Meteorological Monographs*, **2019**, 59, 14.1-14.101	5.7	34
205	Improved methodologies for Earth system modelling of atmospheric soluble iron and observation comparisons using the Mechanism of Intermediate complexity for Modelling Iron (MIMI v1.0). *Geoscientific Model Development*, **2019**, 12, 3835-3862	6.3	18
204	Climate change impacts the spread potential of wheat stem rust, a significant crop disease. *Environmental Research Letters*, **2019**, 14, 124053	6.2	16
203	Sustained climate warming drives declining marine biological productivity. *Science*, **2018**, 359, 1139-1143	33.3	176
202	Impacts of Aerosol Dry Deposition on Black Carbon Spatial Distributions and Radiative Effects in the Community Atmosphere Model CAM5. *Journal of Advances in Modeling Earth Systems*, **2018**, 10, 1150-1171	7.1	21

201	Anthropogenic combustion iron as a complex climate forcer. *Nature Communications*, **2018**, 9, 1593	17.4	48
200	Global and regional importance of the direct dust-climate feedback. *Nature Communications*, **2018**, 9, 241	17.4	93
199	Aerosol-Climate Interactions During the Last Glacial Maximum. *Current Climate Change Reports*, **2018**, 4, 99-114	9	14
198	Black carbon radiative effects highly sensitive to emitted particle size when resolving mixing-state diversity. *Nature Communications*, **2018**, 9, 3446	17.4	59
197	Atmospheric processing of iron in mineral and combustion aerosols: development of an intermediate-complexity mechanism suitable for Earth system models. *Atmospheric Chemistry and Physics*, **2018**, 18, 14175-14196	6.8	23
196	Reviews and syntheses: the GESAMP atmospheric iron deposition model intercomparison study. *Biogeosciences*, **2018**, 15, 6659-6684	4.6	44
195	Aerosol trace metal leaching and impacts on marine microorganisms. *Nature Communications*, **2018**, 9, 2614	17.4	98
194	The PMIP4 contribution to CMIP6 – Part 1: Overview and over-arching analysis plan. *Geoscientific Model Development*, **2018**, 11, 1033-1057	6.3	106
193	Aerosol Deposition Impacts on Land and Ocean Carbon Cycles. *Current Climate Change Reports*, **2017**, 3, 16-31	9	64
192	Comments on "Influence of measurement uncertainties on fractional solubility of iron in mineral aerosols over the oceans" Aeolian Research 22, 85–92. *Aeolian Research*, **2017**, 25, 123-125	3.9	7
191	Parameterization-based uncertainty in future lightning flash density. *Geophysical Research Letters*, **2017**, 44, 2893-2901	4.9	28
190	Interactions between land use change and carbon cycle feedbacks. *Global Biogeochemical Cycles*, **2017**, 31, 96-113	5.9	31
189	Are the impacts of land use on warming underestimated in climate policy?. *Environmental Research Letters*, **2017**, 12, 094016	6.2	12
188	The PMIP4 contribution to CMIP6 – Part 2: Two interglacials, scientific objective and experimental design for Holocene and Last Interglacial simulations. *Geoscientific Model Development*, **2017**, 10, 3979-4003	6.3	92
187	The PMIP4 contribution to CMIP6 – Part 4: Scientific objectives and experimental design of the PMIP4-CMIP6 Last Glacial Maximum experiments and PMIP4 sensitivity experiments **2017**,		1
186	Development of a global aerosol model using a two-dimensional sectional method: 2. Evaluation and sensitivity simulations. *Journal of Advances in Modeling Earth Systems*, **2017**, 9, 1887-1920	7.1	26
185	Sensitivity of the interannual variability of mineral aerosol simulations to meteorological forcing dataset. *Atmospheric Chemistry and Physics*, **2017**, 17, 3253-3278	6.8	11
184	The PMIP4 contribution to CMIP6 – Part 4: Scientific objectives and experimental design of the PMIP4-CMIP6 Last Glacial Maximum experiments and PMIP4 sensitivity experiments. *Geoscientific Model Development*, **2017**, 10, 4035-4055	6.3	98

183	Tracing dust input to the global ocean using thorium isotopes in marine sediments: ThoroMap. *Global Biogeochemical Cycles*, **2016**, 30, 1526-1541	5.9	42
182	Shape and size constraints on dust optical properties from the Dome C ice core, Antarctica. *Scientific Reports*, **2016**, 6, 28162	4.9	44
181	Attribution of changes in global wetland methane emissions from pre-industrial to present using CLM4.5-BGC. *Environmental Research Letters*, **2016**, 11, 034020	6.2	16
180	West African monsoon decadal variability and surface-related forcings: Second West African Monsoon Modeling and Evaluation Project Experiment (WAMME II). *Climate Dynamics*, **2016**, 47, 3517-3545	4.2	29
179	Paleodust variability since the Last Glacial Maximum and implications for iron inputs to the ocean. *Geophysical Research Letters*, **2016**, 43, 3944-3954	4.9	56
178	Temperature Extremes in the Community Atmosphere Model with Stochastic Parameterizations*. *Journal of Climate*, **2016**, 29, 241-258	4.4	5
177	Projections of leaf area index in earth system models. *Earth System Dynamics*, **2016**, 7, 211-229	4.8	65
176	Estimate of changes in agricultural terrestrial nitrogen pathways and ammonia emissions from 1850 to present in the Community Earth System Model. *Biogeosciences*, **2016**, 13, 3397-3426	4.6	62
175	The PMIP4 contribution to CMIP6 Part 2: Two Interglacials, Scientific Objective and Experimental Design for Holocene and Last Interglacial Simulations **2016**,		7
174	Potentially bioavailable iron delivery by iceberg-hosted sediments and atmospheric dust to the polar oceans. *Biogeosciences*, **2016**, 13, 3887-3900	4.6	51
173	PMIP4-CMIP6: the contribution of the Paleoclimate Modelling Intercomparison Project to CMIP6 **2016**,		17
172	Effects of African dust deposition on phytoplankton in the western tropical Atlantic Ocean off Barbados. *Global Biogeochemical Cycles*, **2016**, 30, 716-734	5.9	63
171	CH₄ parameter estimation in CLM4.5bgc using surrogate global optimization **2015**,		7
170	Multicentury changes in ocean and land contributions to the climate-carbon feedback. *Global Biogeochemical Cycles*, **2015**, 29, 744-759	5.9	49
169	The sensitivity of global climate to the episodicity of fire aerosol emissions. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 11,589	4.4	15
168	Is atmospheric phosphorus pollution altering global alpine Lake stoichiometry?. *Global Biogeochemical Cycles*, **2015**, 29, 1369-1383	5.9	88
167	Modeling dust as component minerals in the Community Atmosphere Model: development of framework and impact on radiative forcing. *Atmospheric Chemistry and Physics*, **2015**, 15, 537-561	6.8	92
166	CH₄ parameter estimation in CLM4.5bgc using surrogate global optimization. *Geoscientific Model Development*, **2015**, 8, 3285-3310	6.3	14

165	Seasonal and interannual variability in wetland methane emissions simulated by CLM4Me' and CAM-chem and comparisons to observations of concentrations. *Biogeosciences*, **2015**, 12, 4029-4049	4.6	16
164	Local sources of global climate forcing from different categories of land use activities. *Earth System Dynamics*, **2015**, 6, 175-194	4.8	11
163	Twelve thousand years of dust: the Holocene global dust cycle constrained by natural archives. *Climate of the Past*, **2015**, 11, 869-903	3.9	84
162	Modeling the global emission, transport and deposition of trace elements associated with mineral dust. *Biogeosciences*, **2015**, 12, 5771-5792	4.6	39
161	A model-based evaluation of tropical climate in Pangaea during the late Palaeozoic icehouse. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **2015**, 425, 109-127	2.9	25
160	Extreme eolian delivery of reactive iron to late Paleozoic icehouse seas. *Geology*, **2015**, G37226.1	5	3
159	The size distribution of desert dust aerosols and its impact on the Earth system. *Aeolian Research*, **2014**, 15, 53-71	3.9	323
158	Preindustrial-Control and Twentieth-Century Carbon Cycle Experiments with the Earth System Model CESM1(BGC). *Journal of Climate*, **2014**, 27, 8981-9005	4.4	125
157	Addendum to: A global assessment of precipitation chemistry and deposition of sulfur, nitrogen, sea salt, base cations, organic acids, acidity and pH, and phosphorus *Atmospheric Environment*, **2014**, 93, 101-116	5.3	8
156	The significance of the episodic nature of atmospheric deposition to Low Nutrient Low Chlorophyll regions. *Global Biogeochemical Cycles*, **2014**, 28, 1179-1198	5.9	90
155	An improved dust emission model Part 2: Evaluation in the Community Earth System Model, with implications for the use of dust source functions. *Atmospheric Chemistry and Physics*, **2014**, 14, 13043-13061	6.8	65
154	Potential climate forcing of land use and land cover change. *Atmospheric Chemistry and Physics*, **2014**, 14, 12701-12724	6.8	49
153	An improved dust emission model Part 1: Model description and comparison against measurements. *Atmospheric Chemistry and Physics*, **2014**, 14, 13023-13041	6.8	109
152	The sensitivity of carbon turnover in the Community Land Model to modified assumptions about soil processes. *Earth System Dynamics*, **2014**, 5, 211-221	4.8	25
151	Simulated changes in atmospheric dust in response to a Heinrich stadial. *Paleoceanography*, **2014**, 29, 30-43		15
150	Improved dust representation in the Community Atmosphere Model. *Journal of Advances in Modeling Earth Systems*, **2014**, 6, 541-570	7.1	181
149	Contributions of developed and developing countries to global climate forcing and surface temperature change. *Environmental Research Letters*, **2014**, 9, 074008	6.2	30
148	A global assessment of precipitation chemistry and deposition of sulfur, nitrogen, sea salt, base cations, organic acids, acidity and pH, and phosphorus. *Atmospheric Environment*, **2014**, 93, 3-100	5.3	490

147	Ocean–Atmosphere Interactions of Particles. *Springer Earth System Sciences*, **2014**, 171-246	0.3	21
146	The Community Earth System Model: A Framework for Collaborative Research. *Bulletin of the American Meteorological Society*, **2013**, 94, 1339-1360	6.1	1412
145	Atmospheric Biogeochemistry **2013**, 7-29		
144	The role of mineral-dust aerosols in polar temperature amplification. *Nature Climate Change*, **2013**, 3, 487-491	21.4	54
143	Equatorial upwelling enhances nitrogen fixation in the Atlantic Ocean. *Geophysical Research Letters*, **2013**, 40, 1766-1771	4.9	44
142	The fate of phosphorus fertilizer in Amazon soya bean fields. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2013**, 368, 20120154	5.8	47
141	Atmospheric Carbon Dioxide Variability in the Community Earth System Model: Evaluation and Transient Dynamics during the Twentieth and Twenty-First Centuries. *Journal of Climate*, **2013**, 26, 4447-4475	4.4	45
140	Processes and patterns of oceanic nutrient limitation. *Nature Geoscience*, **2013**, 6, 701-710	18.3	1113
139	Radiative forcing in the ACCMIP historical and future climate simulations. *Atmospheric Chemistry and Physics*, **2013**, 13, 2939-2974	6.8	324
138	North-South asymmetry in the modeled phytoplankton community response to climate change over the 21st century. *Global Biogeochemical Cycles*, **2013**, 27, 1274-1290	5.9	33
137	Global review and synthesis of trends in observed terrestrial near-surface wind speeds: Implications for evaporation. *Journal of Hydrology*, **2012**, 416-417, 182-205	6	730
136	Atmospheric fluxes of organic N and P to the global ocean. *Global Biogeochemical Cycles*, **2012**, 26,	5.9	152
135	Direct measurements of atmospheric iron, cobalt, and aluminum-derived dust deposition at Kerguelen Islands. *Global Biogeochemical Cycles*, **2012**, 26, n/a-n/a	5.9	31
134	A paleogeographic approach to aerosol prescription in simulations of deep time climate. *Journal of Advances in Modeling Earth Systems*, **2012**, 4, n/a-n/a	7.1	18
133	Dust transport from non-East Asian sources to the North Pacific. *Geophysical Research Letters*, **2012** , 39, n/a-n/a	4.9	24
132	Atmospheric transport and deposition of mineral dust to the ocean: implications for research needs. *Environmental Science & Technology*, **2012**, 46, 10390-404	10.3	148
131	The impacts of climate, land use, and demography on fires during the 21st century simulated by CLM-CN. *Biogeosciences*, **2012**, 9, 509-525	4.6	108
130	Sensitivity of wetland methane emissions to model assumptions: application and model testing against site observations. *Biogeosciences*, **2012**, 9, 2793-2819	4.6	57

129	Comparing modeled and observed changes in mineral dust transport and deposition to Antarctica between the Last Glacial Maximum and current climates. *Climate Dynamics*, **2012**, 38, 1731-1755	4.2	74
128	Volcano impacts on climate and biogeochemistry in a coupled carbon-climate model **2012**,		5
127	Volcano impacts on climate and biogeochemistry in a coupled carbon□climate model. *Earth System Dynamics*, **2012**, 3, 121-136	4.8	4
126	Toward a minimal representation of aerosols in climate models: description and evaluation in the Community Atmosphere Model CAM5. *Geoscientific Model Development*, **2012**, 5, 709-739	6.3	648
125	Comment on "Climate sensitivity estimated from temperature reconstructions of the Last Glacial Maximum". *Science*, **2012**, 337, 1294; author reply 1294	33.3	5
124	The changing radiative forcing of fires: global model estimates for past, present and future. *Atmospheric Chemistry and Physics*, **2012**, 12, 10857-10886	6.8	153
123	Impacts of atmospheric nutrient deposition on marine productivity: Roles of nitrogen, phosphorus, and iron. *Global Biogeochemical Cycles*, **2011**, 25, n/a-n/a	5.9	148
122	Impacts of anthropogenic SOx, NOx and NH3 on acidification of coastal waters and shipping lanes. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	37
121	Aerosol Impacts on Climate and Biogeochemistry. *Annual Review of Environment and Resources*, **2011**, 36, 45-74	17.2	157
120	Model insight into glacial□interglacial paleodust records. *Quaternary Science Reviews*, **2011**, 30, 832-854	3.9	49
119	Desert dust and anthropogenic aerosol interactions in the Community Climate System Model coupled-carbon-climate model. *Biogeosciences*, **2011**, 8, 387-414	4.6	38
118	Global dust model intercomparison in AeroCom phase I. *Atmospheric Chemistry and Physics*, **2011**, 11, 7781-7816	6.8	662
117	Simulated variations of eolian dust from inner Asian deserts at the mid-Pliocene, last glacial maximum, and present day: contributions from the regional tectonic uplift and global climate change. *Climate Dynamics*, **2011**, 37, 2289-2301	4.2	38
116	Climate sensitivity estimated from temperature reconstructions of the Last Glacial Maximum. *Science*, **2011**, 334, 1385-8	33.3	178
115	Barriers to predicting changes in global terrestrial methane fluxes: analyses using CLM4Me, a methane biogeochemistry model integrated in CESM. *Biogeosciences*, **2011**, 8, 1925-1953	4.6	271
114	Toward a minimal representation of aerosol direct and indirect effects: model description and evaluation **2011**,		19
113	Aerosol indirect effect on biogeochemical cycles and climate. *Science*, **2011**, 334, 794-6	33.3	295
112	Fire dynamics during the 20th century simulated by the Community Land Model. *Biogeosciences*, **2010**, 7, 1877-1902	4.6	163

111	Impacts of atmospheric nutrient inputs on marine biogeochemistry. *Journal of Geophysical Research* , **2010**, 115,		105
110	Toward New Frontiers in Understanding the Link Between Dust and Climate; DUSTSPEC Workshop: Dust Records for a Changing World; Palisades, New York, 24–26 May 2010. *Eos*, **2010**, 91, 360	1.5	
109	Historical (1850–2000) gridded anthropogenic and biomass burning emissions of reactive gases and aerosols: methodology and application. *Atmospheric Chemistry and Physics*, **2010**, 10, 7017-7039	6.8	1724
108	Observed 20th century desert dust variability: impact on climate and biogeochemistry. *Atmospheric Chemistry and Physics*, **2010**, 10, 10875-10893	6.8	286
107	Intercomparison and analyses of the climatology of the West African Monsoon in the West African Monsoon Modeling and Evaluation project (WAMME) first model intercomparison experiment. *Climate Dynamics*, **2010**, 35, 3-27	4.2	110
106	Satellite-detected fluorescence reveals global physiology of ocean phytoplankton. *Biogeosciences*, **2009**, 6, 779-794	4.6	204
105	Maintenance of Lower Tropospheric Temperature Inversion in the Saharan Air Layer by Dust and Dry Anomaly. *Journal of Climate*, **2009**, 22, 5149-5162	4.4	44
104	Skill metrics for confronting global upper ocean ecosystem-biogeochemistry models against field and remote sensing data. *Journal of Marine Systems*, **2009**, 76, 95-112	2.7	177
103	Systematic assessment of terrestrial biogeochemistry in coupled climate–carbon models. *Global Change Biology*, **2009**, 15, 2462-2484	11.4	299
102	Atmospheric iron deposition: global distribution, variability, and human perturbations. *Annual Review of Marine Science*, **2009**, 1, 245-78	15.4	461
101	Mechanisms governing interannual variability in upper-ocean inorganic carbon system and air–sea CO2 fluxes: Physical climate and atmospheric dust. *Deep-Sea Research Part II: Topical Studies in Oceanography*, **2009**, 56, 640-655	2.3	131
100	A numerical study of the climate response to lowered Mediterranean Sea level during the Messinian Salinity Crisis. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **2009**, 279, 41-59	2.9	37
99	Impacts of increasing anthropogenic soluble iron and nitrogen deposition on ocean biogeochemistry. *Global Biogeochemical Cycles*, **2009**, 23, n/a-n/a	5.9	98
98	Impact of changes in atmospheric conditions in modulating summer dust concentration at Barbados: A back-trajectory analysis. *Journal of Geophysical Research*, **2009**, 114,		16
97	Anthropogenic and natural contributions to regional trends in aerosol optical depth, 1980–2006. *Journal of Geophysical Research*, **2009**, 114,		172
96	Toxicity of atmospheric aerosols on marine phytoplankton. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 4601-5	11.5	263
95	Springtime warming and reduced snow cover from carbonaceous particles. *Atmospheric Chemistry and Physics*, **2009**, 9, 2481-2497	6.8	417
94	Particulate absorption of solar radiation: anthropogenic aerosols vs. dust. *Atmospheric Chemistry and Physics*, **2009**, 9, 3935-3945	6.8	30

93	Interannual variability in hindcasts of atmospheric chemistry: the role of meteorology. *Atmospheric Chemistry and Physics*, **2009**, 9, 5261-5280	6.8	23
92	Carbon-nitrogen interactions regulate climate-carbon cycle feedbacks: results from an atmosphere-ocean general circulation model. *Biogeosciences*, **2009**, 6, 2099-2120	4.6	366
91	Increasing eolian dust deposition in the western United States linked to human activity. *Nature Geoscience*, **2008**, 1, 189-195	18.3	376
90	Combustion iron distribution and deposition. *Global Biogeochemical Cycles*, **2008**, 22, n/a-n/a	5.9	225
89	Revisiting atmospheric dust export to the Southern Hemisphere ocean: Biogeochemical implications. *Global Biogeochemical Cycles*, **2008**, 22, n/a-n/a	5.9	143
88	Ocean temperature forcing by aerosols across the Atlantic tropical cyclone development region. *Geochemistry, Geophysics, Geosystems*, **2008**, 9, n/a-n/a	3.6	45
87	Long-term variability in Saharan dust transport and its link to North Atlantic sea surface temperature. *Geophysical Research Letters*, **2008**, 35, n/a-n/a	4.9	26
86	Modeling mineral dust emissions from the Sahara desert using new surface properties and soil database. *Journal of Geophysical Research*, **2008**, 113,		163
85	Contribution of ocean, fossil fuel, land biosphere, and biomass burning carbon fluxes to seasonal and interannual variability in atmospheric CO2. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		63
84	Research Opportunities and Challenges in the Indian Ocean. *Eos*, **2008**, 89, 125-126	1.5	11
83	Global distribution of atmospheric phosphorus sources, concentrations and deposition rates, and anthropogenic impacts. *Global Biogeochemical Cycles*, **2008**, 22, n/a-n/a	5.9	504
82	Covariant glacial-interglacial dust fluxes in the equatorial Pacific and Antarctica. *Science*, **2008**, 320, 93-6	33.3	188
81	Impact of variable air-sea O₂ and CO₂ fluxes on atmospheric potential oxygen (APO) and land-ocean carbon sink partitioning. *Biogeosciences*, **2008**, 5, 875-889	4.6	16
80	Dust emission response to climate in southern Africa. *Journal of Geophysical Research*, **2007**, 112,		78
79	Atlantic Southern Ocean productivity: Fertilization from above or below?. *Global Biogeochemical Cycles*, **2007**, 21, n/a-n/a	5.9	44
78	Interannual and seasonal variability in atmospheric N2O. *Global Biogeochemical Cycles*, **2007**, 21, n/a-n/a	5.9	44
77	Influence of carbon-nitrogen cycle coupling on land model response to CO2 fertilization and climate variability. *Global Biogeochemical Cycles*, **2007**, 21, n/a-n/a	5.9	556
76	Atmospheric deposition and surface stratification as controls of contrasting chlorophyll abundance in the North Indian Ocean. *Journal of Geophysical Research*, **2007**, 112,		48

75	Exploring the sensitivity of interannual basin-scale air-sea CO2 fluxes to variability in atmospheric dust deposition using ocean carbon cycle models and atmospheric CO2 inversions. *Journal of Geophysical Research*, **2007**, 112,		9
74	Anthropocene changes in desert area: Sensitivity to climate model predictions. *Geophysical Research Letters*, **2007**, 34,	4.9	81
73	Impact of Desert Dust Radiative Forcing on Sahel Precipitation: Relative Importance of Dust Compared to Sea Surface Temperature Variations, Vegetation Changes, and Greenhouse Gas Warming. *Journal of Climate*, **2007**, 20, 1445-1467	4.4	252
72	Impact of anthropogenic atmospheric nitrogen and sulfur deposition on ocean acidification and the inorganic carbon system. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 14580-5	11.5	280
71	Global trends in visibility: implications for dust sources. *Atmospheric Chemistry and Physics*, **2007**, 7, 3309-3339	4.8	180
70	Dissolved iron in the vicinity of the Crozet Islands, Southern Ocean. *Deep-Sea Research Part II: Topical Studies in Oceanography*, **2007**, 54, 1999-2019	2.3	141
69	Sea-salt aerosol response to climate change: Last Glacial Maximum, preindustrial, and doubled carbon dioxide climates. *Journal of Geophysical Research*, **2006**, 111,		65
68	Change in atmospheric mineral aerosols in response to climate: Last glacial period, preindustrial, modern, and doubled carbon dioxide climates. *Journal of Geophysical Research*, **2006**, 111, n/a-n/a		325
67	Climate response and radiative forcing from mineral aerosols during the last glacial maximum, pre-industrial, current and doubled-carbon dioxide climates. *Geophysical Research Letters*, **2006**, 33,	4.9	119
66	Characteristics of Atmospheric Transport Using Three Numerical Formulations for Atmospheric Dynamics in a Single GCM Framework. *Journal of Climate*, **2006**, 19, 2243-2266	4.4	55
65	Nitrogen fixation amplifies the ocean biogeochemical response to decadal timescale variations in mineral dust deposition. *Tellus, Series B: Chemical and Physical Meteorology*, **2006**, 58, 560-572	3.3	103
64	Global iron connections between desert dust, ocean biogeochemistry, and climate. *Science*, **2005**, 308, 67-71	33.3	1996
63	Iron, manganese, and lead at Hawaii Ocean Time-series station ALOHA: Temporal variability and an intermediate water hydrothermal plume. *Geochimica Et Cosmochimica Acta*, **2005**, 69, 933-952	5.5	184
62	Atmospheric global dust cycle and iron inputs to the ocean. *Global Biogeochemical Cycles*, **2005**, 19, n/a-n/a	5.9	777
61	Simulation of absorbing aerosol indices for African dust. *Journal of Geophysical Research*, **2005**, 110,		39
60	Assessment of the global impact of aerosols on tropospheric oxidants. *Journal of Geophysical Research*, **2005**, 110,		252
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21	The changing radiative forcing of fires: global model estimates for past, present and future	6
20	Modeling dust as component minerals in the Community Atmosphere Model: development of framework and impact on radiative forcing	2
19	An improved dust emission model with insights into the global dust cycle's climate sensitivity	6
18	Global trends in visibility: implications for dust sources	2
17	Particulate absorption of solar radiation: anthropogenic aerosols vs. dust	1
16	Modeling the global emission, transport and deposition of trace elements associated with mineral dust	3
15	Estimate of changes in agricultural terrestrial nitrogen pathways and ammonia emissions from 1850 to present in the Community Earth System Model	1
14	Seasonal and inter-annual variability in wetland methane emissions simulated by CLM4Me' and CAM-chem and comparisons to observations of concentrations	1
13	Satellite-detected fluorescence reveals global physiology of ocean phytoplankton	2
12	Carbon-nitrogen interactions regulate climate-carbon cycle feedbacks: results from an atmosphere-ocean general circulation model	26
11	Fire dynamics during the 20th century simulated by the Community Land Model	6
10	Desert dust and anthropogenic aerosol interactions in the Community Climate System Model coupled-carbon-climate model	3
9	Barriers to predicting changes in global terrestrial methane fluxes: analyses using CLM4Me, a methane biogeochemistry model integrated in CESM	12
8	Sensitivity of wetland methane emissions to model assumptions: application and model testing against site observations	6
7	The impacts of climate, land use, and demography on fires during the 21st century simulated by CLM-CN	5
6	Twelve thousand years of dust: the Holocene global dust cycle constrained by natural archives	2
5	Glacial-interglacial variability in Tropical Pangaean Precipitation during the Late Paleozoic Ice Age: simulations with the Community Climate System Model	5
4	Leaf Area Index in Earth System Models: evaluation and projections	5

3	Potential climate forcing of land use and land cover change		1
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