

# Paul I Palmer

## List of Publications by Citations

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188  
papers

15,372  
citations

58  
h-index

122  
g-index

250  
ext. papers

18,198  
ext. citations

7.9  
avg, IF

6.04  
L-index

#	Paper	IF	Citations
188	Estimates of global terrestrial isoprene emissions using MEGAN (Model of Emissions of Gases and Aerosols from Nature). <i>Atmospheric Chemistry and Physics</i> , <b>2006</b> , 6, 3181-3210	6.8	3065
187	Three decades of global methane sources and sinks. <i>Nature Geoscience</i> , <b>2013</b> , 6, 813-823	18.3	1293
186	Atmospheric composition change [g]lobal and regional air quality. <i>Atmospheric Environment</i> , <b>2009</b> , 43, 5268-5350	5.3	592
185	Global Carbon Budget 2020. <i>Earth System Science Data</i> , <b>2020</b> , 12, 3269-3340	10.5	533
184	Atmospheric composition change: EcosystemsAtmosphere interactions. <i>Atmospheric Environment</i> , <b>2009</b> , 43, 5193-5267	5.3	506
183	Global inventory of nitrogen oxide emissions constrained by space-based observations of NO <sub>2</sub> columns. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		374
182	Mapping isoprene emissions over North America using formaldehyde column observations from space. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		295
181	An improved retrieval of tropospheric nitrogen dioxide from GOME. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, ACH 9-1		293
180	Air mass factor formulation for spectroscopic measurements from satellites: Application to formaldehyde retrievals from the Global Ozone Monitoring Experiment. <i>Journal of Geophysical Research</i> , <b>2001</b> , 106, 14539-14550		269
179	Large-scale controls of methanogenesis inferred from methane and gravity spaceborne data. <i>Science</i> , <b>2010</b> , 327, 322-5	33.3	268
178	Why are estimates of global terrestrial isoprene emissions so similar (and why is this not so for monoterpenes)?. <i>Atmospheric Chemistry and Physics</i> , <b>2008</b> , 8, 4605-4620	6.8	265
177	TransCom model simulations of CH <sub>4</sub> and related species: linking transport, surface flux and chemical loss with CH <sub>4</sub> variability in the troposphere and lower stratosphere. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 12813-12837	6.8	258
176	Global atmospheric budget of acetaldehyde: 3-D model analysis and constraints from in-situ and satellite observations. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 3405-3425	6.8	234
175	Transatlantic transport of pollution and its effects on surface ozone in Europe and North America. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, ACH 4-1		220
174	Quantifying the seasonal and interannual variability of North American isoprene emissions using satellite observations of the formaldehyde column. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		204
173	Space-based formaldehyde measurements as constraints on volatile organic compound emissions in east and south Asia and implications for ozone. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		189
172	Comparative inverse analysis of satellite (MOPITT) and aircraft (TRACE-P) observations to estimate Asian sources of carbon monoxide. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		185

171	Satellite observations of formaldehyde over North America from GOME. <i>Geophysical Research Letters</i> , <b>2000</b> , 27, 3461-3464	4.9	185
170	Methane observations from the Greenhouse Gases Observing SATellite: Comparison to ground-based TCCON data and model calculations. <i>Geophysical Research Letters</i> , <b>2011</b> , 38,	4.9	181
169	Tropospheric Emissions: Monitoring of Pollution (TEMPO). <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2017</b> , 186, 17-39	2.1	163
168	Inverting for emissions of carbon monoxide from Asia using aircraft observations over the western Pacific. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		157
167	Export efficiency of black carbon aerosol in continental outflow: Global implications. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		154
166	A chemical survey of exoplanets with ARIEL. <i>Experimental Astronomy</i> , <b>2018</b> , 46, 135-209	1.3	148
165	Remote sensed and in situ constraints on processes affecting tropical tropospheric ozone. <i>Atmospheric Chemistry and Physics</i> , <b>2007</b> , 7, 815-838	6.8	141
164	Contribution of isoprene to chemical budgets: A model tracer study with the NCAR CTM MOZART-4. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113, n/a-n/a		128
163	Overview: oxidant and particle photochemical processes above a south-east Asian tropical rainforest (the OP3 project): introduction, rationale, location characteristics and tools. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 169-199	6.8	120
162	Constraining global isoprene emissions with Global Ozone Monitoring Experiment (GOME) formaldehyde column measurements. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		119
161	Improved retrievals of carbon dioxide from Orbiting Carbon Observatory-2 with the version 8 ACOS algorithm. <i>Atmospheric Measurement Techniques</i> , <b>2018</b> , 11, 6539-6576	4	116
160	Estimating surface CO <sub>2</sub> fluxes from space-borne CO <sub>2</sub> dry air mole fraction observations using an ensemble Kalman Filter. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 2619-2633	6.8	115
159	Atmospheric carbon dioxide retrieved from the Greenhouse gases Observing SATellite (GOSAT): Comparison with ground-based TCCON observations and GEOS-Chem model calculations. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		113
158	Improved quantification of Chinese carbon fluxes using CO <sub>2</sub> /CO correlations in Asian outflow. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		113
157	Toward robust and consistent regional CO <sub>2</sub> flux estimates from in situ and spaceborne measurements of atmospheric CO <sub>2</sub> . <i>Geophysical Research Letters</i> , <b>2014</b> , 41, 1065-1070	4.9	103
156	Seasonal and interannual variability of North American isoprene emissions as determined by formaldehyde column measurements from space. <i>Geophysical Research Letters</i> , <b>2003</b> , 30, n/a-n/a	4.9	100
155	Quantifying global marine isoprene fluxes using MODIS chlorophyll observations. <i>Geophysical Research Letters</i> , <b>2005</b> , 32,	4.9	96
154	Biomass burning emission inventory with daily resolution: Application to aircraft observations of Asian outflow. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		95

153	Evaluation of a photosynthesis-based biogenic isoprene emission scheme in JULES and simulation of isoprene emissions under present-day climate conditions. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 4371-4389	6.8	91
152	Asian emissions of CO and NO <sub>x</sub> : Constraints from aircraft and Chinese station data. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		87
151	Net ecosystem fluxes of isoprene over tropical South America inferred from Global Ozone Monitoring Experiment (GOME) observations of HCHO columns. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		84
150	Large Chinese land carbon sink estimated from atmospheric carbon dioxide data. <i>Nature</i> , <b>2020</b> , 586, 720-723	50.4	81
149	An intercomparison of inverse models for estimating sources and sinks of CO <sub>2</sub> using GOSAT measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2015</b> , 120, 5253-5266	4.4	79
148	Sources and budgets for CO and O <sub>3</sub> in the northeastern Pacific during the spring of 2001: Results from the PHOBEA-II Experiment. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		78
147	Estimating regional methane surface fluxes: the relative importance of surface and GOSAT mole fraction measurements. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 5697-5713	6.8	77
146	Estimating European volatile organic compound emissions using satellite observations of formaldehyde from the Ozone Monitoring Instrument. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 11501-11517	6.8	77
145	The influence of boreal biomass burning emissions on the distribution of tropospheric ozone over North America and the North Atlantic during 2010. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 2077-2098	6.8	76
144	A nonlinear optimal estimation inverse method for radio occultation measurements of temperature, humidity, and surface pressure. <i>Journal of Geophysical Research</i> , <b>2000</b> , 105, 17513-17526		74
143	Introduction to the special issue In-depth study of air pollution sources and processes within Beijing and its surrounding region (APHH-Beijing) <i>Atmospheric Chemistry and Physics</i> , <b>2019</b> , 19, 7519-7546	6.8	73
142	Top-down estimate of a large source of atmospheric carbon monoxide associated with fuel combustion in Asia. <i>Geophysical Research Letters</i> , <b>2002</b> , 29, 6-1-6-4	4.9	71
141	Evaluating a 3-D transport model of atmospheric CO <sub>2</sub> using ground-based, aircraft, and space-borne data. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 2789-2803	6.8	70
140	Potential of observations from the Tropospheric Emission Spectrometer to constrain continental sources of carbon monoxide. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108, n/a-n/a		67
139	The 2015-2016 carbon cycle as seen from OCO-2 and the global in situ network. <i>Atmospheric Chemistry and Physics</i> , <b>2019</b> , 19, 9797-9831	6.8	66
138	Global methane emission estimates from ultraviolet irradiation of terrestrial plant foliage. <i>New Phytologist</i> , <b>2010</b> , 187, 417-425	9.8	65
137	Water vapour transport associated with tropical temperate trough systems over southern Africa and the southwest Indian Ocean. <i>International Journal of Climatology</i> , <b>2004</b> , 24, 555-568	3.5	65
136	Earth systems: Model human adaptation to climate change. <i>Nature</i> , <b>2014</b> , 512, 365-6	50.4	65

135	Size-dependent wet removal of black carbon in Canadian biomass burning plumes. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 13755-13771	6.8	63
134	Using CO <sub>2</sub> :CO correlations to improve inverse analyses of carbon fluxes. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		60
133	An intercomparison and evaluation of aircraft-derived and simulated CO from seven chemical transport models during the TRACE-P experiment. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		59
132	The influence of biomass burning on the global distribution of selected non-methane organic compounds. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 851-867	6.8	58
131	On the impact of transport model errors for the estimation of CO <sub>2</sub> surface fluxes from GOSAT observations. <i>Geophysical Research Letters</i> , <b>2010</b> , 37, n/a-n/a	4.9	58
130	Eastern Asian emissions of anthropogenic halocarbons deduced from aircraft concentration data. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108, n/a-n/a		58
129	Ozone photochemistry in boreal biomass burning plumes. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 7321-7341	6.8	56
128	Estimates of European uptake of CO <sub>2</sub> inferred from GOSAT XCH <sub>4</sub> :CO <sub>2</sub> retrievals: sensitivity to measurement bias inside and outside Europe. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 1289-1302	6.8	55
127	Seasonal variability of tropical wetland CH <sub>4</sub> emissions: the role of the methanogen-available carbon pool. <i>Biogeosciences</i> , <b>2012</b> , 9, 2821-2830	4.6	55
126	Global distributions of carbonyl sulfide in the upper troposphere and stratosphere. <i>Geophysical Research Letters</i> , <b>2008</b> , 35,	4.9	54
125	Does GOSAT capture the true seasonal cycle of carbon dioxide?. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 13023-13040	6.8	53
124	Quantifying the Impact of Atmospheric Transport Uncertainty on CO Surface Flux Estimates. <i>Global Biogeochemical Cycles</i> , <b>2019</b> , 33, 484-500	5.9	52
123	Properties and evolution of biomass burning organic aerosol from Canadian boreal forest fires. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 3077-3095	6.8	52
122	Assessing 5 years of GOSAT Proxy XCH <sub>4</sub> data and associated uncertainties. <i>Atmospheric Measurement Techniques</i> , <b>2015</b> , 8, 4785-4801	4	52
121	Ozarks Isoprene Experiment (OZIE): Measurements and modeling of the Isoprene volcano. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		51
120	Net carbon emissions from African biosphere dominate pan-tropical atmospheric CO signal. <i>Nature Communications</i> , <b>2019</b> , 10, 3344	17.4	49
119	Regulated large-scale annual shutdown of Amazonian isoprene emissions?. <i>Geophysical Research Letters</i> , <b>2009</b> , 36,	4.9	48
118	First directly retrieved global distribution of tropospheric column ozone from GOME: Comparison with the GEOS-CHEM model. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		48

117	Quantifying the impact of BOREal forest fires on Tropospheric oxidants over the Atlantic using Aircraft and Satellites (BORTAS) experiment: design, execution and science overview. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 6239-6261	6.8	45
116	Can a state-of-the-art chemistry transport model simulate Amazonian tropospheric chemistry?. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		43
115	What drives the observed variability of HCN in the troposphere and lower stratosphere?. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 8531-8543	6.8	43
114	Phenology as a strategy for carbon optimality: a global model. <i>Biogeosciences</i> , <b>2014</b> , 11, 763-778	4.6	41
113	Long-term tropospheric formaldehyde concentrations deduced from ground-based fourier transform solar infrared measurements. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 7131-7142	6.8	39
112	Identifying the sources driving observed PM <sub>2.5</sub> temporal variability over Halifax, Nova Scotia, during BORTAS-B. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 7199-7213	6.8	37
111	UK surface NO <sub>2</sub> levels dropped by 42 % during the COVID-19 lockdown: impact on surface O <sub>3</sub> . <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 15743-15759	6.8	36
110	Vertical transport of surface fire emissions observed from space. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115,		35
109	Constraints on Asian and European sources of methane from CH <sub>4</sub> -C <sub>2</sub> H <sub>6</sub> -CO correlations in Asian outflow. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		35
108	Inferring Amazon leaf demography from satellite observations of leaf area index. <i>Biogeosciences</i> , <b>2012</b> , 9, 1389-1404	4.6	34
107	Some implications of sampling choices on comparisons between satellite and model aerosol optical depth fields. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 10705-10716	6.8	34
106	Global upper-tropospheric formaldehyde: seasonal cycles observed by the ACE-FTS satellite instrument. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 3893-3910	6.8	33
105	Consistent regional fluxes of CH <sub>4</sub> and CO <sub>2</sub> inferred from GOSAT proxy XCH <sub>4</sub> : XCO <sub>2</sub> retrievals, 2010-2014. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 4781-4797	6.8	32
104	Correction to Birst directly retrieved global distribution of tropospheric column ozone from GOME: Comparison with the GEOS-CHEM model. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111, n/a-n/a		31
103	An increase in methane emissions from tropical Africa between 2010 and 2016 inferred from satellite data. <i>Atmospheric Chemistry and Physics</i> , <b>2019</b> , 19, 14721-14740	6.8	31
102	The Australian methane budget: Interpreting surface and train-borne measurements using a chemistry transport model. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		30
101	Can simple models predict large-scale surface ocean isoprene concentrations?. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 11807-11821	6.8	29
100	Atmospheric Habitable Zones in Y Dwarf Atmospheres. <i>Astrophysical Journal</i> , <b>2017</b> , 836, 184	4.7	29

99	A quantitative assessment of uncertainties affecting estimates of global mean OH derived from methyl chloroform observations. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		28
98	Impact of the summer 2004 Alaska fires on top of the atmosphere clear-sky radiation fluxes. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		28
97	Quantifying wet scavenging processes in aircraft observations of nitric acid and cloud condensation nuclei. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		28
96	Regional and seasonal variations of the Twomey indirect effect as observed by the ATSR-2 satellite instrument. <i>Geophysical Research Letters</i> , <b>2008</b> , 35,	4.9	27
95	Export of Asian pollution during two cold front episodes of the TRACE-P experiment. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		27
94	Estimating regional fluxes of CO <sub>2</sub> and CH <sub>4</sub> using space-borne observations of XCH <sub>4</sub> ; XCO <sub>2</sub> .	6.8	26
93	<i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 12883-12895		
93	The impact of local surface changes in Borneo on atmospheric composition at wider spatial scales: coastal processes, land-use change and air quality. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2011</b> , 366, 3210-24	5.8	25
92	Changing How Earth System Modeling is Done to Provide More Useful Information for Decision Making, Science, and Society. <i>Bulletin of the American Meteorological Society</i> , <b>2014</b> , 95, 1453-1464	6.1	24
91	Coordinated Airborne Studies in the Tropics (CAST). <i>Bulletin of the American Meteorological Society</i> , <b>2017</b> , 98, 145-162	6.1	23
90	Applying Occam's razor to global agricultural land use change. <i>Environmental Modelling and Software</i> , <b>2016</b> , 75, 212-229	5.2	23
89	Airborne observations of trace gases over boreal Canada during BORTAS: campaign climatology, air mass analysis and enhancement ratios. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 12451-12467	6.8	23
88	Biomass burning emission estimates inferred from satellite column measurements of HCHO: Sensitivity to co-emitted aerosol and injection height. <i>Geophysical Research Letters</i> , <b>2011</b> , 38, n/a-n/a	4.9	22
87	Ethane, ethyne and carbon monoxide concentrations in the upper troposphere and lower stratosphere from ACE and GEOS-Chem: a comparison study. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 9927-9941	6.8	22
86	A measurement-based verification framework for UK greenhouse gas emissions: an overview of the Greenhouse gAs Uk and Global Emissions (GAUGE) project. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 11753-11777	6.8	22
85	The Australian bushfires of February 2009: MIPAS observations and GEM-AQ model results. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 1637-1658	6.8	21
84	Off-line algorithm for calculation of vertical tracer transport in the troposphere due to deep convection. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 1093-1114	6.8	21
83	How sensitive is tropospheric oxidation to anthropogenic emissions?. <i>Geophysical Research Letters</i> , <b>2008</b> , 35,	4.9	21
82	Probabilistic estimation of future emissions of isoprene and surface oxidant chemistry associated with land-use change in response to growing food needs. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 5451-5472	6.8	20

81	Interpreting the variability of space-borne CO <sub>2</sub> column-averaged volume mixing ratios over North America using a chemistry transport model. <i>Atmospheric Chemistry and Physics</i> , <b>2008</b> , 8, 5855-5868	6.8	20
80	The development and evaluation of airborne in situ N <sub>2</sub> O and CH <sub>4</sub> sampling using a quantum cascade laser absorption spectrometer (QCLAS). <i>Atmospheric Measurement Techniques</i> , <b>2016</b> , 9, 63-77	4	20
79	Which processes drive observed variations of HCHO columns over India?. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 4549-4566	6.8	19
78	Assessing London CO <sub>2</sub> , CH <sub>4</sub> and CO emissions using aircraft measurements and dispersion modelling. <i>Atmospheric Chemistry and Physics</i> , <b>2019</b> , 19, 8931-8945	6.8	19
77	Interpreting satellite column observations of formaldehyde over tropical South America. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2007</b> , 365, 1741-51	3	19
76	The Arctic Carbon Cycle and Its Response to Changing Climate. <i>Current Climate Change Reports</i> , <b>2021</b> , 7, 14-34	9	19
75	Analysis of CO <sub>2</sub> mole fraction data: first evidence of large-scale changes in CO <sub>2</sub> uptake at high northern latitudes. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 13739-13758	6.8	18
74	A decade of GOSAT Proxy satellite CH <sub>4</sub> observations. <i>Earth System Science Data</i> , <b>2020</b> , 12, 3383-3412	10.5	18
73	TransCom model simulations of methane: Comparison of vertical profiles with aircraft measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 3891-3904	4.4	17
72	CH <sub>4</sub> concentrations over the Amazon from GOSAT consistent with in situ vertical profile data. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2016</b> , 121, 11,006-11,020	4.4	16
71	Spatiotemporal and probability variations of surface PM over China between 2013 and 2019 and the associated changes in health risks: An integrative observation and model analysis. <i>Science of the Total Environment</i> , <b>2020</b> , 723, 137896	10.2	15
70	A case study of aerosol scavenging in a biomass burning plume over eastern Canada during the 2011 BORTAS field experiment. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 8449-8460	6.8	15
69	Sensitivity of formaldehyde (HCHO) column measurements from a geostationary satellite to temporal variation of the air mass factor in East Asia. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 4673-4686	6.8	15
68	Application of an optimal estimation inverse method to GPS/MET bending angle observations. <i>Journal of Geophysical Research</i> , <b>2001</b> , 106, 17147-17160		15
67	Quantifying pyroconvective injection heights using observations of fire energy: sensitivity of spaceborne observations of carbon monoxide. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 4339-4355	6.8	14
66	Seasonal cycle of emissions of CO inferred from MOPITT profiles of CO: Sensitivity to pyroconvection and profile retrieval assumptions. <i>Geophysical Research Letters</i> , <b>2011</b> , 38, n/a-n/a	4.9	14
65	Iconic CO <sub>2</sub> time series at risk. <i>Science</i> , <b>2012</b> , 337, 1038-40	33.3	13
64	Investigation of CO, C <sub>2</sub> H <sub>6</sub> and aerosols in a boreal fire plume over eastern Canada during BORTAS 2011 using ground- and satellite-based observations and model simulations. <i>Atmospheric Chemistry and Physics</i> , <b>2013</b> , 13, 10227-10241	6.8	13



63	The composition and variability of atmospheric aerosol over Southeast Asia during 2008. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 1083-1100	6.8	12
62	Model bias in simulating major chemical components of PM <sub>2.5</sub> in China. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 12265-12284	6.8	12
61	Quantifying the UK's carbon dioxide flux: an atmospheric inverse modelling approach using a regional measurement network. <i>Atmospheric Chemistry and Physics</i> , <b>2019</b> , 19, 4345-4365	6.8	11
60	Quantifying the response of the ORAC aerosol optical depth retrieval for MSG SEVIRI to aerosol model assumptions. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		11
59	A new space-borne perspective of crop productivity variations over the US Corn Belt. <i>Agricultural and Forest Meteorology</i> , <b>2020</b> , 281, 107826	5.8	11
58	Mapping tropospheric ozone profiles from an airborne ultraviolet-visible spectrometer. <i>Applied Optics</i> , <b>2005</b> , 44, 3312-9	1.7	10
57	Seasonal variation of carbon monoxide in northern Japan: Fourier transform IR measurements and source-labeled model calculations. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		10
56	Ozone chemistry on tidally locked M dwarf planets. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2020</b> , 492, 1691-1705	4.3	9
55	Origin, variability and age of biomass burning plumes intercepted during BORTAS-B. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 13789-13800	6.8	9
54	A comparison of OEM CO retrievals from the IASI and MOPITT instruments. <i>Atmospheric Measurement Techniques</i> , <b>2011</b> , 4, 775-793	4	9
53	Spatial resolution of tropical terrestrial CO <sub>2</sub> fluxes inferred using space-borne column CO <sub>2</sub> sampled in different earth orbits: the role of spatial error correlations. <i>Atmospheric Measurement Techniques</i> , <b>2011</b> , 4, 1995-2006	4	8
52	Quantifying sources and sinks of trace gases using space-borne measurements: current and future science. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2008</b> , 366, 4509-28	3	8
51	Rain-fed pulses of methane from East Africa during 2018-2019 contributed to atmospheric growth rate. <i>Environmental Research Letters</i> , <b>2021</b> , 16, 024021	6.2	8
50	Quantifying the vertical transport of CHBr <sub>3</sub> and CH <sub>2</sub> Br <sub>2</sub> over the western Pacific. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 13135-13153	6.8	8
49	Increasing ambient surface ozone levels over the UK accompanied by fewer extreme events. <i>Atmospheric Environment</i> , <b>2020</b> , 237, 117627	5.3	7
48	Business Giving, the Tsunami and Corporates as Rock Stars: Some Implications for Arts Funding?. <i>Cultural Trends</i> , <b>2006</b> , 15, 299-323	1.1	7
47	Climatology and atmospheric chemistry of the non-methane hydrocarbons ethane and propane over the North Atlantic. <i>Elementa</i> , <b>2015</b> , 3,	3.6	7
46	Potential improvements in global carbon flux estimates from a network of laser heterodyne radiometer measurements of column carbon dioxide. <i>Atmospheric Measurement Techniques</i> , <b>2019</b> , 12, 2579-2594	4	6

45	Reduced Arctic air pollution due to decreasing European and North American emissions. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2016</b> , 121, 8692-8700	4.4	6
44	Estimating wildfire-generated ozone over North America using ozonesonde profiles and a differential back trajectory technique. <i>Atmospheric Environment: X</i> , <b>2020</b> , 7, 100078	2.8	6
43	Impact of biomass burning emission on total peroxy nitrates: fire plume identification during the BORTAS campaign. <i>Atmospheric Measurement Techniques</i> , <b>2016</b> , 9, 5591-5606	4	5
42	Interpreting elevated space-borne HCHO columns over the Mediterranean Sea using the OMI sensor. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 12787-12798	6.8	5
41	Corrigendum to "Overview: oxidant and particle photochemical processes above a south-east Asian tropical rainforest (the OP3 project): introduction, rationale, location characteristics and tools" published in <i>Atmos. Chem. Phys.</i> , 10, 1691-1699, 2010. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 563-563	6.8	5
40	A Decade of GOSAT Proxy Satellite CH <sub>4</sub> Observations		5
39	Comparing national greenhouse gas budgets reported in UNFCCC inventories against atmospheric inversions		5
38	Production of peroxy nitrates in boreal biomass burning plumes over Canada during the BORTAS campaign. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 3485-3497	6.8	4
37	The 2015-2016 Carbon Cycle As Seen from OCO-2 and the Global In Situ Network		4
36	Photochemical environment over Southeast Asia primed for hazardous ozone levels with influx of nitrogen oxides from seasonal biomass burning. <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 1917-1935	6.8	4
35	The role of satellite observations in understanding the impact of El Niño on the carbon cycle: current capabilities and future opportunities. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2018</b> , 373,	5.8	4
34	The added value of satellite observations of methane for understanding the contemporary methane budget. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2021</b> , 379, 20210106	3	4
33	Country-scale greenhouse gas budgets using shipborne measurements: a case study for the UK and Ireland. <i>Atmospheric Chemistry and Physics</i> , <b>2019</b> , 19, 3043-3063	6.8	3
32	Observed and CMIP5-Simulated Radiative Flux Variability Over West Africa. <i>Earth and Space Science</i> , <b>2020</b> , 7, e2019EA001017	3.1	3
31	Diurnal, seasonal, and annual trends in tropospheric CO in Southwest London during 2000-2015: Wind sector analysis and comparisons with urban and remote sites. <i>Atmospheric Environment</i> , <b>2018</b> , 177, 262-274	5.3	3
30	UK surface NO <sub>2</sub> levels dropped by 42 % during the COVID-19 lockdown: impact on surface O <sub>3</sub>		3
29	Improved Retrievals of Carbon Dioxide from the Orbiting Carbon Observatory-2 with the version 8 ACOS algorithm		3
28	Introduction to Special Issue "In-depth study of air pollution sources and processes within Beijing and its surrounding region (APHH-Beijing) 2018,		3

27	Seasonal distribution and drivers of surface fine particulate matter and organic aerosol over the Indo-Gangetic Plain. <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 10881-10909	6.8	3
26	Comparing national greenhouse gas budgets reported in UNFCCC inventories against atmospheric inversions. <i>Earth System Science Data</i> , <b>2022</b> , 14, 1639-1675	10.5	3
25	Characterizing energy budget variability at a Sahelian site: a test of NWP model behaviour. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 15095-15119	6.8	2
24	An 11-year record of XCO <sub>2</sub> estimates derived from GOSAT measurements using the NASA ACOS version 9 retrieval algorithm. <i>Earth System Science Data</i> , <b>2022</b> , 14, 325-360	10.5	2
23	Atmospheric observations consistent with reported decline in the UK's methane emissions (2013-2020). <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 16257-16276	6.8	2
22	Detecting changes in Arctic methane emissions: limitations of the inter-polar difference of atmospheric mole fractions. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 17895-17907	6.8	2
21	Detecting changes in Arctic methane emissions: limitations of the inter-polar difference of atmospheric mole fractions <b>2018</b> ,		2
20	The Community Inversion Framework v1.0: a unified system for atmospheric inversion studies. <i>Geoscientific Model Development</i> , <b>2021</b> , 14, 5331-5354	6.3	2
19	An increase in methane emissions from tropical Africa between 2010 and 2016 inferred from satellite data <b>2019</b> ,		1
18	Phenology is the dominant control of methane emissions in a tropical non-forested wetland.. <i>Nature Communications</i> , <b>2022</b> , 13, 133	17.4	1
17	Nocturnal survival of isoprene linked to formation of upper tropospheric organic aerosol.. <i>Science</i> , <b>2022</b> , 375, 562-566	33.3	1
16	Isotopic signatures of methane emissions from tropical fires, agriculture and wetlands: the MOYA and ZWAMPS flights. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2022</b> , 380, 20210112	3	1
15	A model framework to reduce bias in ground-level PM <sub>2.5</sub> concentrations inferred from satellite-retrieved AOD. <i>Atmospheric Environment</i> , <b>2021</b> , 248, 118217	5.3	1
14	Contrasting Observed Atmospheric Responses to Tropical Sea Surface Temperature Warming Patterns. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2021</b> , 126, e2020JD033564	4.4	1
13	Monitoring Greenhouse Gases from Space. <i>Remote Sensing</i> , <b>2021</b> , 13, 2700	5	1
12	Surface fluxes of bromoform and dibromomethane over the tropical western Pacific inferred from airborne in situ measurements. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 14787-14798	6.8	1
11	Estimates of sub-national methane emissions from inversion modelling <b>2018</b> ,		1
10	GreenHouse gas Observations of the Stratosphere and Troposphere (GHOST): an airborne shortwave-infrared spectrometer for remote sensing of greenhouse gases. <i>Atmospheric Measurement Techniques</i> , <b>2018</b> , 11, 5199-5222	4	1

- 9 Reply to: The size of the land carbon sink in China.. *Nature*, **2022**, 603, E10-E12 50.4 1
- 8 Tropical methane emissions explain large fraction of recent changes in global atmospheric methane growth rate.. *Nature Communications*, **2022**, 13, 1378 17.4 1
- 7 Automated detection of atmospheric NO<sub>2</sub> plumes from satellite data: a tool to help infer anthropogenic combustion emissions. *Atmospheric Measurement Techniques*, **2022**, 15, 721-733 4.33 0
- 6 Photochemistry of Methane and Ethane in the Martian Atmosphere. *Journal of Geophysical Research E: Planets*, **2020**, 125, e2020JE006491 4.1 0
- 5 Reply to: On the role of atmospheric model transport uncertainty in estimating the Chinese land carbon sink.. *Nature*, **2022**, 603, E15-E16 50.4 0
- 4 Improved calibration procedures for the EM27/SUN spectrometers of the Collaborative Carbon Column Observing Network (COCCON). *Atmospheric Measurement Techniques*, **2022**, 15, 2433-2463 4 0
- 3 Longitudinally Asymmetric Stratospheric Oscillation on a Tidally Locked Exoplanet. *Astrophysical Journal*, **2022**, 930, 152 4.7 0
- 2 Simulating Land-Use Change in China from a Global Perspective **2014**, 165-177
- 1 Tropospheric formaldehyde measurements from the ESA GOME instrument **2001**, 4150, 1