

# Daven Henze

## 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.

161  
papers

7,261  
citations

45  
h-index

80  
g-index

171  
ext. papers

8,861  
ext. citations

7.1  
avg, IF

5.99  
L-index

#	Paper	IF	Citations
161	Sector-Based Top-Down Estimates of NO <sub>x</sub> , SO <sub>2</sub> , and CO Emissions in East Asia. <i>Geophysical Research Letters</i> , <b>2022</b> , 49,	4.9	2
160	Decadal Variabilities in Tropospheric Nitrogen Oxides Over United States, Europe, and China. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2022</b> , 127, e2021JD035872	4.4	1
159	How well can inverse analyses of high-resolution satellite data resolve heterogeneous methane fluxes? Observing system simulation experiments with the GEOS-Chem adjoint model (v35). <i>Geoscientific Model Development</i> , <b>2021</b> , 14, 7775-7793	6.3	1
158	Assessment of Updated Fuel-Based Emissions Inventories Over the Contiguous United States Using TROPOMI NO <sub>2</sub> Retrievals. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2021</b> , 126, e2021JD035484	4.4	1
157	Societal shifts due to COVID-19 reveal large-scale complexities and feedbacks between atmospheric chemistry and climate change. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	5
156	Transboundary transport of ozone pollution to a US border region: A case study of Yuma. <i>Environmental Pollution</i> , <b>2021</b> , 273, 116421	9.3	1
155	Sensitivities of Ozone Air Pollution in the Beijing-Tianjin-Hebei Area to Local and Upwind Precursor Emissions Using Adjoint Modeling. <i>Environmental Science &amp; Technology</i> , <b>2021</b> , 55, 5752-5762	10.3	10
154	Responses of Arctic black carbon and surface temperature to multi-region emission reductions: a Hemispheric Transport of Air Pollution Phase 2 (HTAP2) ensemble modeling study. <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 8637-8654	6.8	2
153	Characterizing model errors in chemical transport modeling of methane: using GOSAT XCH <sub>4</sub> data with weak-constraint four-dimensional variational data assimilation. <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 9545-9572	6.8	3
152	A fuel-based method for updating mobile source emissions during the COVID-19 pandemic. <i>Environmental Research Letters</i> , <b>2021</b> , 16, 065018	6.2	7
151	Aircraft-based inversions quantify the importance of wetlands and livestock for Upper Midwest methane emissions. <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 951-971	6.8	7
150	High-resolution hybrid inversion of IASI ammonia columns to constrain US ammonia emissions using the CMAQ adjoint model. <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 2067-2082	6.8	5
149	Secondary organic aerosols from anthropogenic volatile organic compounds contribute substantially to air pollution mortality. <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 11201-11224	6.8	12
148	Satellite Monitoring for Air Quality and Health. <i>Annual Review of Biomedical Data Science</i> , <b>2021</b> , 4, 417-447	4.7	6
147	Integrated assessment of global climate, air pollution, and dietary, malnutrition and obesity health impacts of food production and consumption between 2014 and 2018. <i>Environmental Research Communications</i> , <b>2021</b> , 3, 075001	3.1	3
146	Global Estimates and Long-Term Trends of Fine Particulate Matter Concentrations (1998-2018). <i>Environmental Science &amp; Technology</i> , <b>2020</b> , 54, 7879-7890	10.3	143
145	Comparing health benefit calculations for alternative energy futures. <i>Air Quality, Atmosphere and Health</i> , <b>2020</b> , 13, 773-787	5.6	0

144	Inverse modeling of SO <sub>2</sub> and NO <sub>x</sub> emissions over China using multisensor satellite data [Part 2: Downscaling techniques for air quality analysis and forecasts. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 6651-6670	6.8	9
143	Intercomparison of Magnitudes and Trends in Anthropogenic Surface Emissions From Bottom-Up Inventories, Top-Down Estimates, and Emission Scenarios. <i>Earth's Future</i> , <b>2020</b> , 8, e2020EF001520	7.9	23
142	Sources of black carbon during severe haze events in the Beijing-Tianjin-Hebei region using the adjoint method. <i>Science of the Total Environment</i> , <b>2020</b> , 740, 140149	10.2	3
141	Using Satellites to Track Indicators of Global Air Pollution and Climate Change Impacts: Lessons Learned From a NASA-Supported Science-Stakeholder Collaborative. <i>GeoHealth</i> , <b>2020</b> , 4, e2020GH000270	7.0	11
140	Inverse modeling of SO <sub>2</sub> and NO <sub>x</sub> emissions over China using multisensor satellite data [Part 1: Formulation and sensitivity analysis. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 6631-6650	6.8	7
139	Enhanced parallelization of the incremental 4D-Var data assimilation algorithm using the Randomized Incremental Optimal Technique. <i>Quarterly Journal of the Royal Meteorological Society</i> , <b>2020</b> , 146, 1351-1371	6.4	5
138	The Multi-Scale Infrastructure for Chemistry and Aerosols (MUSICA). <i>Bulletin of the American Meteorological Society</i> , <b>2020</b> , 101, E1743-E1760	6.1	10
137	Long-term observational constraints of organic aerosol dependence on inorganic species in the southeast US. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 13091-13107	6.8	5
136	Impacts of global NO <sub>x</sub> inversions on NO <sub>2</sub> and ozone simulations. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 13109-13130	6.8	14
135	Effects of a priori profile shape assumptions on comparisons between satellite NO <sub>2</sub> columns and model simulations. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 7231-7241	6.8	3
134	A multiphase CMAQ version 5.0 adjoint. <i>Geoscientific Model Development</i> , <b>2020</b> , 13, 2925-2944	6.3	7
133	Inverse modeling of NH <sub>3</sub> sources using CrIS remote sensing measurements. <i>Environmental Research Letters</i> , <b>2020</b> , 15, 104082	6.2	10
132	Improving NO <sub>2</sub> and ozone simulations through global NO <sub>x</sub> emission inversions <b>2020</b> ,		1
131	Development of the Low Emissions Analysis Platform - Integrated Benefits Calculator (LEAP-IBC) tool to assess air quality and climate co-benefits: Application for Bangladesh. <i>Environment International</i> , <b>2020</b> , 145, 106155	12.9	6
130	Premature Deaths in Brazil Associated With Long-Term Exposure to PM From Amazon Fires Between 2016 and 2019. <i>GeoHealth</i> , <b>2020</b> , 4, e2020GH000268	5	17
129	Mitigating the impacts of air pollutants in Nepal and climate co-benefits: a scenario-based approach. <i>Air Quality, Atmosphere and Health</i> , <b>2020</b> , 13, 361-370	5.6	4
128	Methods, availability, and applications of PM exposure estimates derived from ground measurements, satellite, and atmospheric models. <i>Journal of the Air and Waste Management Association</i> , <b>2019</b> , 69, 1391-1414	2.4	45
127	Inequality of household consumption and air pollution-related deaths in China. <i>Nature Communications</i> , <b>2019</b> , 10, 4337	17.4	53

126	Evaluation of tropospheric ozone and ozone precursors in simulations from the HTAPII and CCM1 model intercomparisons with a focus on the Indian subcontinent. <i>Atmospheric Chemistry and Physics</i> , <b>2019</b> , 19, 6437-6458	6.8	17
125	Assessing the Iterative Finite Difference Mass Balance and 4D-Var Methods to Derive Ammonia Emissions Over North America Using Synthetic Observations. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2019</b> , 124, 4222-4236	4.4	8
124	Particulate matter-attributable mortality and relationships with carbon dioxide in 250 urban areas worldwide. <i>Scientific Reports</i> , <b>2019</b> , 9, 11552	4.9	48
123	Hybrid Mass Balance/4D-Var Joint Inversion of NO and SO Emissions in East Asia. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2019</b> , 124, 8203-8224	4.4	18
122	SO Emission Estimates Using OMI SO Retrievals for 2005-2017. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2019</b> , 124, 8336-8359	4.4	28
121	The cascade of global trade to large climate forcing over the Tibetan Plateau glaciers. <i>Nature Communications</i> , <b>2019</b> , 10, 3281	17.4	15
120	Quantifying Emissions of CO and NO <sub>x</sub> Using Observations From MOPITT, OMI, TES, and OSIRIS. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2019</b> , 124, 1170-1193	4.4	6
119	Inversion Estimates of Lognormally Distributed Methane Emission Rates From the Haynesville-Bossier Oil and Gas Production Region Using Airborne Measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2019</b> , 124, 3520-3531	4.4	11
118	Elucidating emissions control strategies for ozone to protect human health and public welfare within the continental United States. <i>Environmental Research Letters</i> , <b>2019</b> , 14, 124093	6.2	3
117	Prior biosphere model impact on global terrestrial CO <sub>2</sub> fluxes estimated from OCO-2 retrievals. <i>Atmospheric Chemistry and Physics</i> , <b>2019</b> , 19, 13267-13287	6.8	13
116	Constraining global aerosol emissions using POLDER/PARASOL satellite remote sensing observations. <i>Atmospheric Chemistry and Physics</i> , <b>2019</b> , 19, 14585-14606	6.8	24
115	Optimal and scalable methods to approximate the solutions of large-scale Bayesian problems: theory and application to atmospheric inversion and data assimilation. <i>Quarterly Journal of the Royal Meteorological Society</i> , <b>2018</b> , 144, 365-390	6.4	8
114	Top-down constraints on global N <sub>2</sub> O emissions at optimal resolution: application of a new dimension reduction technique. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 735-756	6.8	16
113	Unexpected slowdown of US pollutant emission reduction in the past decade. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 5099-5104	11.5	103
112	Agricultural ammonia emissions in China: reconciling bottom-up and top-down estimates. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 339-355	6.8	128
111	HTAP2 multi-model estimates of premature human mortality due to intercontinental transport of air pollution and emission sectors. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 10497-10520	6.8	34
110	Scientific assessment of background ozone over the U.S.: Implications for air quality management. <i>Elementa</i> , <b>2018</b> , 6, 56	3.6	52
109	Two-scale multi-model ensemble: is a hybrid ensemble of opportunity telling us more?. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 2727-2744	6.8	7

108	Adjoint inversion of Chinese non-methane volatile organic compound emissions using space-based observations of formaldehyde and glyoxal. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 15017-15046	6.8	29
107	Long-range transport impacts on surface aerosol concentrations and the contributions to haze events in China: an HTAP2 multi-model study. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 15581-15600	6.8	6
106	The impact of future emission policies on tropospheric ozone using a parameterised approach. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 8953-8978	6.8	29
105	The effects of intercontinental emission sources on European air pollution levels. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 13655-13672	6.8	23
104	Estimates of the Global Burden of Ambient [Formula: see text], Ozone, and [Formula: see text] on Asthma Incidence and Emergency Room Visits. <i>Environmental Health Perspectives</i> , <b>2018</b> , 126, 107004	8.4	132
103	Retrieval of desert dust and carbonaceous aerosol emissions over Africa from POLDER/PARASOL products generated by the GRASP algorithm. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 12551-12580	6.8	44
102	Multi-model study of HTAPII on sulfur and nitrogen deposition. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 6847-6866	6.8	27
101	Intra-urban spatial variability of surface ozone in Riverside, CA: viability and validation of low-cost sensors. <i>Atmospheric Measurement Techniques</i> , <b>2018</b> , 11, 1777-1792	4	26
100	PM source attribution for Seoul in May from 2009 to 2013 using GEOS-Chem and its adjoint model. <i>Environmental Pollution</i> , <b>2017</b> , 221, 377-384	9.3	33
99	Transient climate and ambient health impacts due to national solid fuel cookstove emissions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 1269-1274	11.5	74
98	Improving present day and future estimates of anthropogenic sectoral emissions and the resulting air quality impacts in Africa. <i>Faraday Discussions</i> , <b>2017</b> , 200, 397-412	3.6	11
97	Preterm birth associated with maternal fine particulate matter exposure: A global, regional and national assessment. <i>Environment International</i> , <b>2017</b> , 101, 173-182	12.9	142
96	What factors control the trend of increasing AAOD over the United States in the last decade?. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2017</b> , 122, 1797-1810	4.4	16
95	Emission Impacts of Electric Vehicles in the US Transportation Sector Following Optimistic Cost and Efficiency Projections. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 6665-6673	10.3	12
94	Monthly top-down NOx emissions for China (2005-2012): A hybrid inversion method and trend analysis. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2017</b> , 122, 4600-4625	4.4	49
93	Comparing mass balance and adjoint methods for inverse modeling of nitrogen dioxide columns for global nitrogen oxide emissions. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2017</b> , 122, 4718-4734	4.4	21
92	Impacts and mitigation of excess diesel-related NO emissions in 11 major vehicle markets. <i>Nature</i> , <b>2017</b> , 545, 467-471	50.4	298
91	How accounting for climate and health impacts of emissions could change the US energy system. <i>Energy Policy</i> , <b>2017</b> , 102, 396-405	7.2	16

90	Sense size-dependent dust loading and emission from space using reflected solar and infrared spectral measurements: An observation system simulation experiment. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2017</b> , 122, 8233-8254	4.4	9
89	Updated Global Estimates of Respiratory Mortality in Adults 30 Years of Age Attributable to Long-Term Ozone Exposure. <i>Environmental Health Perspectives</i> , <b>2017</b> , 125, 087021	8.4	121
88	Top-down estimate of methane emissions in California using a mesoscale inverse modeling technique: The San Joaquin Valley. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2017</b> , 122, 3686-3694	4.4	22
87	Modeling the diurnal variability of agricultural ammonia in Bakersfield, California, during the CalNex campaign. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 2721-2739	6.8	11
86	Impact of intercontinental pollution transport on North American ozone air pollution: an HTAP phase 2 multi-model study. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 5721-5750	6.8	36
85	Four-dimensional variational inversion of black carbon emissions during ARCTAS-CARB with WRFDA-Chem. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 7605-7633	6.8	9
84	Sources of springtime surface black carbon in the Arctic: an adjoint analysis for April 2008. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 9697-9716	6.8	33
83	Source attribution of Arctic black carbon constrained by aircraft and surface measurements. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 11971-11989	6.8	47
82	A 15-year record of CO emissions constrained by MOPITT CO observations. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 4565-4583	6.8	69
81	Sources and Processes Affecting Fine Particulate Matter Pollution over North China: An Adjoint Analysis of the Beijing APEC Period. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 8731-40	10.3	70
80	Global and regional radiative forcing from 20 % reductions in BC, OC and SO <sub>2</sub> in an HTAP2 multi-model study. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 13579-13599	6.8	37
79	Constraints on methane emissions in North America from future geostationary remote-sensing measurements. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 6175-6190	6.8	15
78	Inverse modeling of pan-Arctic methane emissions at high spatial resolution: what can we learn from assimilating satellite retrievals and using different process-based wetland and lake biogeochemical models?. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 12649-12666	6.8	16
77	Sources of nitrogen deposition in Federal Class I areas in the US. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 525-540	6.8	16
76	Impacts of anthropogenic and natural sources on free tropospheric ozone over the Middle East. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 6537-6546	6.8	7
75	The influence of air quality model resolution on health impact assessment for fine particulate matter and its components. <i>Air Quality, Atmosphere and Health</i> , <b>2016</b> , 9, 51-68	5.6	64
74	Impacts of Foreign, Domestic, and State-Level Emissions on Ozone-Induced Vegetation Loss in the United States. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 806-13	10.3	20
73	Assessing public health burden associated with exposure to ambient black carbon in the United States. <i>Science of the Total Environment</i> , <b>2016</b> , 539, 515-525	10.2	62

72	A new approach for monthly updates of anthropogenic sulfur dioxide emissions from space: Application to China and implications for air quality forecasts. <i>Geophysical Research Letters</i> , <b>2016</b> , 43, 9931-9938	4.9	24
71	Formation of Low Volatility Organic Compounds and Secondary Organic Aerosol from Isoprene Hydroxyhydroperoxide Low-NO Oxidation. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 10330-9	10.3	139
70	Differences between magnitudes and health impacts of BC emissions across the United States using 12 km scale seasonal source apportionment. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 4362-71	10.3	15
69	Response of global particulate-matter-related mortality to changes in local precursor emissions. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 4335-44	10.3	88
68	Source attribution of particulate matter pollution over North China with the adjoint method. <i>Environmental Research Letters</i> , <b>2015</b> , 10, 084011	6.2	92
67	Improved western U.S. background ozone estimates via constraining nonlocal and local source contributions using Aura TES and OMI observations. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2015</b> , 120, 3572-3592	4.4	12
66	Sources and Impacts of Atmospheric NH <sub>3</sub> : Current Understanding and Frontiers for Modeling, Measurements, and Remote Sensing in North America. <i>Current Pollution Reports</i> , <b>2015</b> , 1, 95-116	7.6	43
65	Improved analysis-error covariance matrix for high-dimensional variational inversions: application to source estimation using a 3D atmospheric transport model. <i>Quarterly Journal of the Royal Meteorological Society</i> , <b>2015</b> , 141, 1906-1921	6.4	35
64	Atmospheric nitrogen deposition to the northwestern Pacific: seasonal variation and source attribution. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 10905-10924	6.8	41
63	Sensitivity analysis of the potential impact of discrepancies in stratosphere-troposphere exchange on inferred sources and sinks of CO <sub>2</sub> . <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 11773-11788	6.8	17
62	Estimates of black carbon emissions in the western United States using the GEOS-Chem adjoint model. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 7685-7702	6.8	10
61	Regional data assimilation of multi-spectral MOPITT observations of CO over North America. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 6801-6814	6.8	23
60	Constraints on Asian ozone using Aura TES, OMI and Terra MOPITT. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 99-112	6.8	17
59	The impact of observing characteristics on the ability to predict ozone under varying polluted photochemical regimes. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 10645-10667	6.8	5
58	Constraining black carbon aerosol over Asia using OMI aerosol absorption optical depth and the adjoint of GEOS-Chem. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 10281-10308	6.8	33
57	Sensitivity of top-down CO source estimates to the modeled vertical structure in atmospheric CO. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 1521-1537	6.8	27
56	Implications of RCP emissions for future changes in vegetative exposure to ozone in the western U.S.. <i>Geophysical Research Letters</i> , <b>2015</b> , 42, 4190-4198	4.9	8
55	Global climate impacts of country-level primary carbonaceous aerosol from solid-fuel cookstove emissions. <i>Environmental Research Letters</i> , <b>2015</b> , 10, 114003	6.2	24

54	Toronto area ozone: Long-term measurements and modeled sources of poor air quality events. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2015</b> , 120, 11,368-11,390	4.4	12
53	Premature deaths attributed to source-specific BC emissions in six urban US regions. <i>Environmental Research Letters</i> , <b>2015</b> , 10, 114014	6.2	13
52	Tropospheric Emission Spectrometer (TES) satellite observations of ammonia, methanol, formic acid, and carbon monoxide over the Canadian oil sands: validation and model evaluation. <i>Atmospheric Measurement Techniques</i> , <b>2015</b> , 8, 5189-5211	4	24
51	Simulation of atmospheric N <sub>2</sub> O with GEOS-Chem and its adjoint: evaluation of observational constraints. <i>Geoscientific Model Development</i> , <b>2015</b> , 8, 3179-3198	6.3	13
50	Development and application of the WRFPLUS-Chem online chemistry adjoint and WRFDA-Chem assimilation system. <i>Geoscientific Model Development</i> , <b>2015</b> , 8, 1857-1876	6.3	13
49	Source-receptor relationships of column-average CO <sub>2</sub> and implications for the impact of observations on flux inversions. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2015</b> , 120, 5214-5236	4.4	19
48	Ammonia emissions in the United States, European Union, and China derived by high-resolution inversion of ammonium wet deposition data: Interpretation with a new agricultural emissions inventory (MASAGE_NH <sub>3</sub> ). <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2014</b> , 119, 4343-4364	4.4	25 <sup>0</sup>
47	Assessment of source contributions to seasonal vegetative exposure to ozone in the U.S.. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2014</b> , 119, 324-340	4.4	35
46	Quantifying global terrestrial methanol emissions using observations from the TES satellite sensor. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 2555-2570	6.8	31
45	Inferring regional sources and sinks of atmospheric CO <sub>2</sub> from GOSAT XCO <sub>2</sub> data. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 3703-3727	6.8	91
44	Analysis of transpacific transport of black carbon during HIPPO-3: implications for black carbon aging. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 6315-6327	6.8	28
43	Emissions estimation from satellite retrievals: A review of current capability. <i>Atmospheric Environment</i> , <b>2013</b> , 77, 1011-1042	5.3	27 <sup>0</sup>
42	GLIMPSE: a rapid decision framework for energy and environmental policy. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 12011-9	10.3	23
41	Accounting for climate and air quality damages in future U.S. electricity generation scenarios. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 3065-72	10.3	28
40	Sources and processes contributing to nitrogen deposition: an adjoint model analysis applied to biodiversity hotspots worldwide. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 3226-33	10.3	64
39	Response to comment on "Natural and anthropogenic ethanol sources in North America and potential atmospheric impacts of ethanol fuel use". <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 2141	10.3	3
38	Assessing remote polarimetric measurement sensitivities to aerosol emissions using the geos-chem adjoint model. <i>Atmospheric Measurement Techniques</i> , <b>2013</b> , 6, 3441-3457	4	8
37	Constraining U.S. ammonia emissions using TES remote sensing observations and the GEOS-Chem adjoint model. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 3355-3368	4.4	98



36	Improving simulations of fine dust surface concentrations over the western United States by optimizing the particle size distribution. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 3270-3275	4.9	44
35	Constraints on aerosol sources using GEOS-Chem adjoint and MODIS radiances, and evaluation with multisensor (OMI, MISR) data. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 6396-6413	4.4	78
34	Persistent sensitivity of Asian aerosol to emissions of nitrogen oxides. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 1021-1026	4.9	36
33	Impact of model errors in convective transport on CO source estimates inferred from MOPITT CO retrievals. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 2073-2083	4.4	50
32	Attribution of direct ozone radiative forcing to spatially resolved emissions. <i>Geophysical Research Letters</i> , <b>2012</b> , 39, n/a-n/a	4.9	28
31	Using a global aerosol model adjoint to unravel the footprint of spatially-distributed emissions on cloud droplet number and cloud albedo. <i>Geophysical Research Letters</i> , <b>2012</b> , 39,	4.9	7
30	Spatially refined aerosol direct radiative forcing efficiencies. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 9511-8	10.3	45
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28	Top-down estimate of dust emissions through integration of MODIS and MISR aerosol retrievals with the GEOS-Chem adjoint model. <i>Geophysical Research Letters</i> , <b>2012</b> , 39, n/a-n/a	4.9	70
27	ANISORROPIA: the adjoint of the aerosol thermodynamic model ISORROPIA. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 527-543	6.8	29
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25	Validation of TES methane with HIPPO aircraft observations: implications for inverse modeling of methane sources. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 1823-1832	6.8	71
24	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
23	Carbonaceous aerosols in China: top-down constraints on primary sources and estimation of secondary contribution. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 2725-2746	6.8	117
22	The spatial extent of source influences on modeled column concentrations of short-lived species. <i>Geophysical Research Letters</i> , <b>2012</b> , 39, n/a-n/a	4.9	24
21	Impacts of midlatitude precursor emissions and local photochemistry on ozone abundances in the Arctic. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		46
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19	Quantifying the impact of model errors on top-down estimates of carbon monoxide emissions using satellite observations. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		53

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15	Comparison of adjoint and analytical Bayesian inversion methods for constraining Asian sources of carbon monoxide using satellite (MOPITT) measurements of CO columns. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		125
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2	Anthropogenic Secondary Organic Aerosols Contribute Substantially to Air Pollution Mortality		2
1	Analysis of recent anthropogenic surface emissions from bottom-up inventories and top-down estimates: are future emission scenarios valid for the recent past?		3

