Dylan B A Jones

List of Publications by Year
in descending order

99	7,213	38	78
papers	citations	h-index	g-index
		87723	66788

128	128	128	6335
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The quasi-biennial oscillation. Reviews of Geophysics, 2001, 39, 179-229.	9.0	1,650
2	Three-dimensional climatological distribution of tropospheric OH: Update and evaluation. Journal of Geophysical Research, 2000, 105, 8931-8980.	3.3	730
3	Precision requirements for space-based data. Journal of Geophysical Research, 2007, 112, .	3.3	322
4	Comparative inverse analysis of satellite (MOPITT) and aircraft (TRACE-P) observations to estimate Asian sources of carbon monoxide. Journal of Geophysical Research, 2004, 109, .	3.3	217
5	Improved estimate of the policy-relevant background ozone in the United States using the GEOS-Chem global model with 1/2Â°ÂÃ—Â2/3Â° horizontal resolution over North America. Atmospheric Environment, 2011, 45, 6769-6776.	1.9	190
6	Inverting for emissions of carbon monoxide from Asia using aircraft observations over the western Pacific. Journal of Geophysical Research, 2003, 108, .	3.3	178
7	Quantifying CO₂ Emissions From Individual Power Plants From Space. Geophysical Research Letters, 2017, 44, 10,045.	1.5	174
8	Terrestrial gross primary production inferred from satellite fluorescence and vegetation models. Global Change Biology, 2014, 20, 3103-3121.	4.2	161
9	Unexpected slowdown of US pollutant emission reduction in the past decade. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5099-5104.	3.3	137
10	Inferring regional sources and sinks of atmospheric CO₂ from GOSAT XCO₂ data. Atmospheric Chemistry and Physics, 2014, 14, 3703-3727.	1.9	120
11	Modeling global atmospheric CO₂ with improved emission inventories and CO₂ production from the oxidation of other carbon species. Geoscientific Model Development, 2010, 3, 689-716.	1.3	117
12	The 2015â€"2016 carbon cycle as seen from OCO-2 and the global in situ network. Atmospheric Chemistry and Physics, 2019, 19, 9797-9831.	1.9	113
13	Characterization of Tropospheric Emission Spectrometer (TES) CO₂ for carbon cycle science. Atmospheric Chemistry and Physics, 2010, 10, 5601-5623.	1.9	100
14	Congo Basin precipitation: Assessing seasonality, regional interactions, and sources of moisture. Journal of Geophysical Research D: Atmospheres, 2017, 122, 6882-6898.	1.2	95
15	Quantifying the Impact of Atmospheric Transport Uncertainty on CO₂ Surface Flux Estimates. Global Biogeochemical Cycles, 2019, 33, 484-500.	1.9	95
16	Inverse modeling of CO₂ sources and sinks using satellite observations of CO₂ from TES and surface flask measurements. Atmospheric Chemistry and Physics, 2011, 11, 6029-6047.	1.9	94
17	Analysis of tropical tropospheric ozone, carbon monoxide, and water vapor during the 2006 El NiÃ±o using TES observations and the GEOSâ€Chem model. Journal of Geophysical Research, 2009, 114, .	3.3	92
18	A 15-year record of CO emissions constrained by MOPITT CO observations. Atmospheric Chemistry and Physics, 2017, 17, 4565-4583.	1.9	92

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19	Carbon monitoring system flux estimation and attribution: impact of ACOS-GOSAT XCO₂ sampling on the inference of terrestrial biospheric sources and sinks. Tellus, Series B: Chemical and Physical Meteorology, 2022, 66, 22486.	0.8	90
20	Interpreting seasonal changes in the carbon balance of southern Amazonia using measurements of XCO₂ and chlorophyll fluorescence from GOSAT. Geophysical Research Letters, 2013, 40, 2829-2833.	1.5	89
21	Evidence of vertical transport of carbon monoxide from Measurements of Pollution in the Troposphere (MOPITT). Geophysical Research Letters, 2004, 31, .	1.5	87
22	Estimating the summertime tropospheric ozone distribution over North America through assimilation of observations from the Tropospheric Emission Spectrometer. Journal of Geophysical Research, 2008, 113, .	3.3	87
23	Potential of observations from the Tropospheric Emission Spectrometer to constrain continental sources of carbon monoxide. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	77
24	Analysis of the summertime buildup of tropospheric ozone abundances over the Middle East and North Africa as observed by the Tropospheric Emission Spectrometer instrument. Journal of Geophysical Research, 2009, 114, .	3.3	72
25	Effects of postcondensation exchange on the isotopic composition of water in the atmosphere. Journal of Geophysical Research, 2010, 115, .	3.3	72
26	Using CO2:CO correlations to improve inverse analyses of carbon fluxes. Journal of Geophysical Research, 2006, 111, .	3.3	67
27	The zonal structure of tropical O₃ and CO as observed by the Tropospheric Emission Spectrometer in November 2004 â€" Part 1: Inverse modeling of CO emissions. Atmospheric Chemistry and Physics, 2009, 9, 3547-3562.	1.9	67
28	Analysis of CO in the tropical troposphere using Aura satellite data and the GEOS-Chem model: insights into transport characteristics of the GEOS meteorological products. Atmospheric Chemistry and Physics, 2010, 10, 12207-12232.	1.9	64
29	Impact of model errors in convective transport on CO source estimates inferred from MOPITT CO retrievals. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2073-2083.	1.2	62
30	Observed vertical distribution of tropospheric ozone during the Asian summertime monsoon. Journal of Geophysical Research, 2009, 114, .	3.3	59
31	Quantifying the impact of model errors on top-down estimates of carbon monoxide emissions using satellite observations. Journal of Geophysical Research, 2011, 116, .	3.3	59
32	Effects of the quasi-biennial oscillation on the zonally averaged transport of tracers. Journal of Geophysical Research, 1998, 103, 11235-11249.	3.3	56
33	Impacts of midlatitude precursor emissions and local photochemistry on ozone abundances in the Arctic. Journal of Geophysical Research, 2012, 117, .	3.3	55
34	FTIR time-series of biomass burning products (HCN,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 157 Td (C<sub>2</sub comparisons with model data. Atmospheric Chemistry and Physics, 2012, 12, 10367-10385.	1.9	52
35	Chinese Regulations Are Workingâ€"Why Is Surface Ozone Over Industrialized Areas Still High? Applying Lessons From Northeast US Air Quality Evolution. Geophysical Research Letters, 2021, 48, e2021GL092816.	1.5	50
36	Impact of the assimilation of ozone from the Tropospheric Emission Spectrometer on surface ozone across North America. Geophysical Research Letters, 2009, 36, .	1.5	49

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37	Quasibiennial oscillation in tropical ozone as revealed by ozonesonde and satellite data. Journal of Geophysical Research, 2003, 108, .	3.3	48
38	Ozone production in boreal fire smoke plumes using observations from the Tropospheric Emission Spectrometer and the Ozone Monitoring Instrument. Journal of Geophysical Research, 2009, 114, .	3.3	48
39	Improved analysisâ€error covariance matrix for highâ€dimensional variational inversions: application to source estimation using a 3D atmospheric transport model. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 1906-1921.	1.0	48
40	Measurement of lowâ€altitude CO over the Indian subcontinent by MOPITT. Journal of Geophysical Research, 2008, 113, .	3.3	47
41	Societal shifts due to COVID-19 reveal large-scale complexities and feedbacks between atmospheric chemistry and climate change. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	42
42	The vertical distribution of ozone instantaneous radiative forcing from satellite and chemistry climate models. Journal of Geophysical Research, 2011, 116, .	3.3	40
43	El NiÃ±o, the 2006 Indonesian peat fires, and the distribution of atmospheric methane. Geophysical Research Letters, 2013, 40, 4938-4943.	1.5	40
44	Combining GOSAT <i>X</i>CO₂ observations over land and ocean to improve regional CO₂ flux estimates. Journal of Geophysical Research D: Atmospheres, 2016, 121, 1896-1913.	1.2	37
45	Evidence for an additional source of atmospheric N2O. Global Biogeochemical Cycles, 1996, 10, 651-659.	1.9	34
46	Transport analysis of ozone enhancement in Southern Ontario during BAQS-Met. Atmospheric Chemistry and Physics, 2011, 11, 2569-2583.	1.9	34
47	Sensitivity of top-down CO source estimates to the modeled vertical structure in atmospheric CO. Atmospheric Chemistry and Physics, 2015, 15, 1521-1537.	1.9	33
48	Global land mapping of satellite-observed CO₂ total columns using spatio-temporal geostatistics. International Journal of Digital Earth, 2017, 10, 426-456.	1.6	33
49	Error correlation between CO₂ and CO as constraint for CO₂ flux inversions using satellite data. Atmospheric Chemistry and Physics, 2009, 9, 7313-7323.	1.9	32
50	Regional data assimilation of multi-spectral MOPITT observations of CO over North America. Atmospheric Chemistry and Physics, 2015, 15, 6801-6814.	1.9	30
51	Large horizontal gradients in atmospheric CO at the synoptic scale as seen by spaceborne Measurements of Pollution in the Troposphere. Journal of Geophysical Research, 2006, 111, .	3.3	29
52	Influence of interannual variations in transport on summertime abundances of ozone over the Middle East. Journal of Geophysical Research, 2011, 116, .	3.3	29
53	Improved method for linear carbon monoxide simulation and sourceÂattribution in atmospheric chemistry models illustratedÂusingÂGEOS-Chem v9. Geoscientific Model Development, 2017, 10, 4129-4144.	1.3	29
54	Characterizing model errors in chemical transport modeling of methane: impact of model resolution in versions v9-02 of GEOS-Chem and v35j of its adjoint model. Geoscientific Model Development, 2020, 13, 3839-3862.	1.3	27

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55	Detection and attribution of wildfire pollution in the Arctic and northern midlatitudes using a network of Fourier-transform infrared spectrometers and GEOS-Chem. Atmospheric Chemistry and Physics, 2020, 20, 12813-12851.	1.9	26
56	The zonal structure of tropical O₃ and CO as observed by the Tropospheric Emission Spectrometer in November 2004 â€“ Part 2: Impact of surface emissions on O₃ and its precursors. Atmospheric Chemistry and Physics, 2009, 9, 3563-3582.	1.9	25
57	Origin of springtime ozone enhancements in the lower troposphere over Beijing: in situ measurements and model analysis. Atmospheric Chemistry and Physics, 2015, 15, 5161-5179.	1.9	25
58	Unprecedented Atmospheric Ammonia Concentrations Detected in the High Arctic From the 2017 Canadian Wildfires. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8178-8202.	1.2	25
59	Constraints on Asian ozone using Aura TES, OMI and Terra MOPITT. Atmospheric Chemistry and Physics, 2015, 15, 99-112.	1.9	24
60	Ozone export from East Asia: The role of PAN. Journal of Geophysical Research D: Atmospheres, 2016, 121, 6555-6563.	1.2	24
61	Sensitivity of CO₂ surface flux constraints to observational coverage. Journal of Geophysical Research D: Atmospheres, 2017, 122, 6672-6694.	1.2	24
62	Analysis of residual mean transport in the stratosphere: 1. Model description and comparison with satellite data. Journal of Geophysical Research, 2000, 105, 19991-20011.	3.3	23
63	Comparison of improved Aura Tropospheric Emission Spectrometer CO₂ with HIPPO and SGP aircraft profile measurements. Atmospheric Chemistry and Physics, 2013, 13, 3205-3225.	1.9	22
64	Evaluating GPP and Respiration Estimates Over Northern Midlatitude Ecosystems Using Solarâ€Induced Fluorescence and Atmospheric CO₂ Measurements. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 2976-2997.	1.3	21
65	Evaluation of MOPITT VersionÂ7 joint TIRâ€“NIR X_{CO} retrievals with TCCON. Atmospheric Measurement Techniques, 2019, 12, 5547-5572.	1.2	21
66	Vertical transport rates and concentrations of OH and Cl radicals in the Tropical Tropopause Layer from observations of CO₂ and halocarbons: implications for distributions of long- and short-lived chemical species. Atmospheric Chemistry and Physics, 2010, 10, 6669-6684.	1.9	19
67	Satellite observations of CO 2 from a highly elliptical orbit for studies of the Arctic and boreal carbon cycle. Journal of Geophysical Research D: Atmospheres, 2014, 119, 2654-2673.	1.2	19
68	Sensitivity analysis of the potential impact of discrepancies in stratosphereâ€“troposphere exchange on inferred sources and sinks of CO₂. Atmospheric Chemistry and Physics, 2015, 15, 11773-11788.	1.9	19
69	On the contribution of anthropogenic Cl to the increase in Î´13C of atmospheric methane. Global Biogeochemical Cycles, 2002, 16, 20-1-20-11.	1.9	16
70	Constraints on meridional transport in the stratosphere imposed by the mean age of air in the lower stratosphere. Journal of Geophysical Research, 2001, 106, 10243-10256.	3.3	15
71	Carbon monoxide (CO) maximum over the Zagros mountains in the Middle East: Signature of mountain venting?. Geophysical Research Letters, 2006, 33, .	1.5	15
72	Iconic CO ₂ Time Series at Risk. Science, 2012, 337, 1038-1040.	6.0	15

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73	Toronto area ozone: Longâ€term measurements and modeled sources of poor air quality events. Journal of Geophysical Research D: Atmospheres, 2015, 120, 11,368.	1.2	15
74	The Atmospheric Imaging Mission for Northern Regions: AIM-North. Canadian Journal of Remote Sensing, 2019, 45, 423-442.	1.1	14
75	Characterizing model errors in chemical transport modeling of methane: using GOSAT XCH₄ data with weak-constraint four-dimensional variational data assimilation. Atmospheric Chemistry and Physics, 2021, 21, 9545-9572.	1.9	14
76	Decadal Variabilities in Tropospheric Nitrogen Oxides Over United States, Europe, and China. Journal of Geophysical Research D: Atmospheres, 2022, 127, e2021JD035872.	1.2	14
77	On what scales can GOSAT flux inversions constrain anomalies in terrestrial ecosystems?. Atmospheric Chemistry and Physics, 2019, 19, 13017-13035.	1.9	13
78	Estimates of black carbon emissions in the western United States using the GEOS-Chem adjoint model. Atmospheric Chemistry and Physics, 2015, 15, 7685-7702.	1.9	12
79	Impacts of anthropogenic and natural sources on free tropospheric ozone over the Middle East. Atmospheric Chemistry and Physics, 2016, 16, 6537-6546.	1.9	12
80	Sahel precipitation and regional teleconnections with the Indian Ocean. Journal of Geophysical Research D: Atmospheres, 2017, 122, 5654-5676.	1.2	12
81	Estimating 2010â€“2015 anthropogenic and natural methane emissions in Canada using ECCC surface and GOSAT satellite observations. Atmospheric Chemistry and Physics, 2021, 21, 18101-18121.	1.9	11
82	Spatial patterns and mechanisms of the quasi-biennial oscillationâ€“annual beat of ozone. Journal of Geophysical Research, 2005, 110, .	3.3	10
83	Emissions of methane in Europe inferred by total column measurements. Atmospheric Chemistry and Physics, 2019, 19, 3963-3980.	1.9	10
84	Monitoring Urban Greenhouse Gases Using Open-Path Fourier Transform Spectroscopy. Atmosphere - Ocean, 2020, 58, 25-45.	0.6	10
85	Quantifying Emissions of CO and NO_x Using Observations From MOPITT, OMI, TES, and OSIRIS. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1170-1193.	1.2	9
86	A comparative analysis for a deep learning model (hyDL-CO v1.0) and Kalman filter to predict CO concentrations in China. Geoscientific Model Development, 2022, 15, 4225-4237.	1.3	9
87	A comparison of posterior atmospheric CO₂ adjustments obtained from in situ and GOSAT constrained flux inversions. Atmospheric Chemistry and Physics, 2018, 18, 12011-12044.	1.9	8
88	Detection of HCOOH, CH₃OH, CO, HCN, and C₂H₆in Wildfire Plumes Transported Over Toronto Using Groundâ€Based FTIR Measurements From 2002â€“2018. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031924.	1.2	8
89	Multiscale observations of NH₃ around Toronto, Canada. Atmospheric Measurement Techniques, 2021, 14, 905-921.	1.2	7
90	Analysis of residual mean transport in the stratosphere: 2. Distributions of CO2and mean age. Journal of Geophysical Research, 2000, 105, 20013-20024.	3.3	6

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91	Deep Learning to Evaluate US NO_x Emissions Using Surface Ozone Predictions. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	6
92	Large discrepancy between observed and modeled wintertime tropospheric NO₂ variabilities due to COVID-19 controls in China. Environmental Research Letters, 2022, 17, 035007.	2.2	4
93	Comment on â€œSeasonal distribution of ozone and its precursors over the tropical Indian region using regional chemistryâ€transport modelâ€•by Sompriti Roy et al.. Journal of Geophysical Research, 2009, 114, .	3.3	3
94	Improving GEOS-Chem Model Tropospheric Ozone through Assimilation of Pseudo Tropospheric Emission Spectrometer Profile Retrievals. Lecture Notes in Computer Science, 2009, , 302-311.	1.0	3
95	Coupling the Canadian Terrestrial Ecosystem Model (CTEM v. 2.0) to Environment and Climate Change Canada's greenhouse gas forecast model (v.107-glb). Geoscientific Model Development, 2018, 11, 631-663.	1.3	2
96	Atmospheric trace gas trends obtained from FTIR column measurements in Toronto, Canada from 2002-2019. Environmental Research Communications, 2021, 3, 051002.	0.9	1
97	The Environment and Climate Change Canada Carbon Assimilation System (EC-CAS v1.0): demonstration with simulated CO observations. Geoscientific Model Development, 2021, 14, 2525-2544.	1.3	1
98	The Resolvable Scales of Regionalâ€Scale CO 2 Transport in the Context of Imperfect Meteorology: The Predictability of CO 2 in a Limitedâ€Area Model. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034896.	1.2	1
99	Analysis of improvements in MOPITT observational coverage over Canada. Atmospheric Measurement Techniques, 2022, 15, 701-719.	1.2	1