David A Plummer

List of Publications by Year
in descending order

73 papers	8,179 citations	94433 37 h-index	82547 72 g-index
124 all docs	124 docs citations	124 times ranked	8940 citing authors

#	Article	IF	Citations
1	Model evaluation of short-lived climate forcers for the Arctic Monitoring and Assessment Programme: a multi-species, multi-model study. Atmospheric Chemistry and Physics, 2022, 22, 5775-5828.	4.9	15
2	The response of mesospheric H₂O and CO to solar irradiance variability in models and observations. Atmospheric Chemistry and Physics, 2021, 21, 201-216.	4.9	6
3	Model estimations of geophysical variability between satellite measurements of ozone profiles. Atmospheric Measurement Techniques, 2021, 14, 1425-1438.	3.1	4
4	Attribution of Chemistry-Climate Model Initiative (CCMI) ozone radiative flux bias from satellites. Atmospheric Chemistry and Physics, 2020, 20, 281-301.	4.9	6
5	Description and Evaluation of the specified-dynamics experiment in the Chemistry-Climate Model Initiative. Atmospheric Chemistry and Physics, 2020, 20, 3809-3840.	4.9	16
6	Future trends in stratosphere-to-troposphere transport in CCMI models. Atmospheric Chemistry and Physics, 2020, 20, 6883-6901.	4.9	25
7	Tropospheric Ozone Assessment Report. Elementa, 2020, 8, .	3.2	52
8	Projecting ozone hole recovery using an ensemble of chemistryâ€“climate models weighted by model performance and independence. Atmospheric Chemistry and Physics, 2020, 20, 9961-9977.	4.9	16
9	Ultraviolet Radiation modelling using output from the Chemistry Climate Model Initiative. , 2019, 19, 10087-10110.		5
10	Extratropical age of air trends and causative factors in climate projection simulations. Atmospheric Chemistry and Physics, 2019, 19, 7627-7647.	4.9	10
11	Evaluating the Relationship between Interannual Variations in the Antarctic Ozone Hole and Southern Hemisphere Surface Climate in Chemistryâ€“Climate Models. Journal of Climate, 2019, 32, 3131-3151.	3.2	13
12	Clear-sky ultraviolet radiation modelling using output from the Chemistry Climate Model Initiative. Atmospheric Chemistry and Physics, 2019, 19, 10087-10110.	4.9	22
13	Large-scale transport into the Arctic: the roles of the midlatitude jet and the Hadley Cell. Atmospheric Chemistry and Physics, 2019, 19, 5511-5528.	4.9	8
14	The influence of mixing on the stratospheric age of air changes in the 21st century. Atmospheric Chemistry and Physics, 2019, 19, 921-940.	4.9	29
15	Large Impacts, Past and Future, of Ozoneâ€Depleting Substances on Brewerâ€Dobson Circulation Trends: A Multimodel Assessment. Journal of Geophysical Research D: Atmospheres, 2019, 124, 6669-6680.	3.3	28
16	Characterising the seasonal and geographical variability in tropospheric ozone, stratospheric influence and recent changes. Atmospheric Chemistry and Physics, 2019, 19, 3589-3620.	4.9	19
17	Inter-model comparison of global hydroxyl radical (OH) distributions and their impact on atmospheric methane over the 2000â€“2016 period. Atmospheric Chemistry and Physics, 2019, 19, 13701-13723.	4.9	52
18	The effect of atmospheric nudging on the stratospheric residual circulation in chemistryâ€“climate models. Atmospheric Chemistry and Physics, 2019, 19, 11559-11586.	4.9	27

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19	Historical Tropospheric and Stratospheric Ozone Radiative Forcing Using the CMIP6 Database. Geophysical Research Letters, 2018, 45, 3264-3273.	4.0	78
20	Ozone sensitivity to varying greenhouse gases and ozone-depleting substances in CCMI-1 simulations. Atmospheric Chemistry and Physics, 2018, 18, 1091-1114.	4.9	56
21	Trend differences in lower stratospheric water vapour between Boulder and the zonal mean and their role in understanding fundamental observational discrepancies. Atmospheric Chemistry and Physics, 2018, 18, 8331-8351.	4.9	14
22	An assessment of natural methane fluxes simulated by the CLASS-CTEM model. Biogeosciences, 2018, 15, 4683-4709.	3.3	23
23	Tropospheric ozone in CCMI models and Gaussian process emulation to understand biases in the SOCOLv3 chemistryâ€“climate model. Atmospheric Chemistry and Physics, 2018, 18, 16155-16172.	4.9	27
24	Assessing stratospheric transport in the CMAM30 simulations using ACE-FTS measurements. Atmospheric Chemistry and Physics, 2018, 18, 6801-6828.	4.9	10
25	Large-scale tropospheric transport in the Chemistryâ€“Climate Model Initiative (CCMI) simulations. Atmospheric Chemistry and Physics, 2018, 18, 7217-7235.	4.9	32
26	Extremal dependence between temperature and ozone over the continental US. Atmospheric Chemistry and Physics, 2018, 18, 11927-11948.	4.9	12
27	No robust evidence of future changes in major stratospheric sudden warmings: a multi-model assessment from CCMI. Atmospheric Chemistry and Physics, 2018, 18, 11277-11287.	4.9	41
28	Stratospheric Injection of Brominated Very Shortâ€Lived Substances: Aircraft Observations in the Western Pacific and Representation in Global Models. Journal of Geophysical Research D: Atmospheres, 2018, 123, 5690-5719.	3.3	36
29	Tropospheric jet response to Antarctic ozone depletion: An update with Chemistry-Climate Model Initiative (CCMI) models. Environmental Research Letters, 2018, 13, 054024.	5.2	38
30	The representation of solar cycle signals in stratospheric ozone â€“ PartÂ2: Analysis of global models. Atmospheric Chemistry and Physics, 2018, 18, 11323-11343.	4.9	18
31	Estimates of ozone return dates from Chemistry-Climate Model Initiative simulations. Atmospheric Chemistry and Physics, 2018, 18, 8409-8438.	4.9	128
32	Quantifying the effect of mixing on the mean age of air in CCMVal-2 and CCMI-1 models. Atmospheric Chemistry and Physics, 2018, 18, 6699-6720.	4.9	32
33	Revisiting the Mystery of Recent Stratospheric Temperature Trends. Geophysical Research Letters, 2018, 45, 9919-9933.	4.0	51
34	Formaldehyde in the Tropical Western Pacific: Chemical Sources and Sinks, Convective Transport, and Representation in CAMâ€Chem and the CCMI Models. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11201-11226.	3.3	32
35	Multi-model impacts of climate change on pollution transport from global emission source regions. Atmospheric Chemistry and Physics, 2017, 17, 14219-14237.	4.9	14
36	Contribution of different processes to changes in tropical lower-stratospheric water vapor in chemistryâ€“climate models. Atmospheric Chemistry and Physics, 2017, 17, 8031-8044.	4.9	23

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37	Review of the global models used within phase 1 of the Chemistryâ€“Climate Model Initiative (CCMI). Geoscientific Model Development, 2017, 10, 639-671.	3.6	277
38	An idealized stratospheric model useful for understanding differences between longâ€lived trace gas measurements and global chemistryâ€climate model output. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5356-5367.	3.3	9
39	Upper tropospheric water vapour variability at high latitudes â€“ Part 1: Influence of the annular modes. Atmospheric Chemistry and Physics, 2016, 16, 3265-3278.	4.9	4
40	The effect of future ambient air pollution on human premature mortality to 2100 using output from the ACCMIP model ensemble. Atmospheric Chemistry and Physics, 2016, 16, 9847-9862.	4.9	101
41	Use of North American and European air quality networks to evaluate global chemistryâ€“climate modeling of surface ozone. Atmospheric Chemistry and Physics, 2015, 15, 10581-10596.	4.9	50
42	Comparison of the CMAM30 data set with ACE-FTS and OSIRIS: polar regions. Atmospheric Chemistry and Physics, 2015, 15, 12465-12485.	4.9	12
43	Vertical structure of stratospheric water vapour trends derived from merged satellite data. Nature Geoscience, 2014, 7, 768-776.	12.9	149
44	The Climate Impact of Past Changes in Halocarbons and CO2 in the Tropical UTLS Region. Journal of Climate, 2014, 27, 8646-8660.	3.2	8
45	Reconciliation of halogen-induced ozone loss with the total-column ozone record. Nature Geoscience, 2014, 7, 443-449.	12.9	78
46	Technical Note: A simple procedure for removing temporal discontinuities in ERA-Interim upper stratospheric temperatures for use in nudged chemistry-climate model simulations. Atmospheric Chemistry and Physics, 2014, 14, 1547-1555.	4.9	36
47	Three decades of global methane sources and sinks. Nature Geoscience, 2013, 6, 813-823.	12.9	1,649
48	Global premature mortality due to anthropogenic outdoor air pollution and the contribution of past climate change. Environmental Research Letters, 2013, 8, 034005.	5.2	381
49	The Canadian Fourth Generation Atmospheric Global Climate Model (CanAM4). Part I: Representation of Physical Processes. Atmosphere - Ocean, 2013, 51, 104-125.	1.6	304
50	Preindustrial to present-day changes in tropospheric hydroxyl radical and methane lifetime from the Atmospheric Chemistry and Climate Model Intercomparison Project (ACCMIP). Atmospheric Chemistry and Physics, 2013, 13, 5277-5298.	4.9	288
51	Contributions to twentieth century total column ozone change from halocarbons, tropospheric ozone precursors, and climate change. Geophysical Research Letters, 2013, 40, 6276-6281.	4.0	9
52	Pre-industrial to end 21st century projections of tropospheric ozone from the Atmospheric Chemistry and Climate Model Intercomparison Project (ACCMIP). Atmospheric Chemistry and Physics, 2013, 13, 2063-2090.	4.9	570
53	Tropospheric ozone changes, radiative forcing and attribution to emissions in the Atmospheric Chemistry and Climate Model Intercomparison Project (ACCMIP). Atmospheric Chemistry and Physics, 2013, 13, 3063-3085.	4.9	361
54	Analysis of present day and future OH and methane lifetime in the ACCMIP simulations. Atmospheric Chemistry and Physics, 2013, 13, 2563-2587.	4.9	257

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55	Evaluation of ACCMIP outgoing longwave radiation from tropospheric ozone using TES satellite observations. Atmospheric Chemistry and Physics, 2013, 13, 4057-4072.	4.9	61
56	Projections of mid-century summer air-quality for North America: effects of changes in climate and precursor emissions. Atmospheric Chemistry and Physics, 2012, 12, 5367-5390.	4.9	60
57	Using transport diagnostics to understand chemistry climate model ozone simulations. Journal of Geophysical Research, 2011, 116, .	3.3	68
58	Projections of UV radiation changes in the 21st century: impact of ozone recovery and cloud effects. Atmospheric Chemistry and Physics, 2011, 11, 7533-7545.	4.9	75
59	Separating the Dynamical Effects of Climate Change and Ozone Depletion. Part II: Southern Hemisphere Troposphere. Journal of Climate, 2011, 24, 1850-1868.	3.2	187
60	Quantifying the contributions to stratospheric ozone changes from ozone depleting substances and greenhouse gases. Atmospheric Chemistry and Physics, 2010, 10, 8803-8820.	4.9	39
61	Multi-model assessment of stratospheric ozone return dates and ozone recovery in CCMVal-2 models. Atmospheric Chemistry and Physics, 2010, 10, 9451-9472.	4.9	215
62	Separating the Dynamical Effects of Climate Change and Ozone Depletion. Part I: Southern Hemisphere Stratosphere. Journal of Climate, 2010, 23, 5002-5020.	3.2	90
63	Chemistryâ€“Climate Model Simulations of Twenty-First Century Stratospheric Climate and Circulation Changes. Journal of Climate, 2010, 23, 5349-5374.	3.2	280
64	Review of the formulation of presentâ€generation stratospheric chemistryâ€climate models and associated external forcings. Journal of Geophysical Research, 2010, 115, .	3.3	150
65	Stratosphereâ€troposphere coupling and annular mode variability in chemistryâ€climate models. Journal of Geophysical Research, 2010, 115, .	3.3	107
66	Evidence for changes in stratospheric transport and mixing over the past three decades based on multiple data sets and tropical leaky pipe analysis. Journal of Geophysical Research, 2010, 115, .	3.3	69
67	Multimodel assessment of the factors driving stratospheric ozone evolution over the 21st century. Journal of Geophysical Research, 2010, 115, .	3.3	66
68	The Impact of Stratospheric Ozone Recovery on Tropopause Height Trends. Journal of Climate, 2009, 22, 429-445.	3.2	68
69	Sensitivity of climate to dynamicallyâ€consistent zonal asymmetries in ozone. Geophysical Research Letters, 2009, 36, .	4.0	56
70	Impact of sudden Arctic seaâ€ice loss on stratospheric polar ozone recovery. Geophysical Research Letters, 2009, 36, .	4.0	35
71	Multimodel projections of stratospheric ozone in the 21st century. Journal of Geophysical Research, 2007, 112, .	3.3	308
72	Assessment of temperature, trace species, and ozone in chemistry-climate model simulations of the recent past. Journal of Geophysical Research, 2006, 111, .	3.3	414

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73	Climate and Climate Change over North America as Simulated by the Canadian RCM. Journal of Climate, 2006, 19, 3112-3132.	3.2	211