

Andrew Dessler

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/9067116/andrew-dessler-publications-by-year.pdf>

Version: 2024-04-24

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

112
papers

5,105
citations

40
h-index

68
g-index

135
ext. papers

5,586
ext. citations

6.3
avg, IF

5.94
L-index

#	Paper	IF	Citations
112	Impacts of the Unforced Pattern Effect on the Cloud Feedback in CERES Observations and Climate Models. <i>Geophysical Research Letters</i> , 2022 , 49,	4.9	
111	Cloud and Aerosol Distributions From SAGE III/ISS Observations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021 , 126, e2021JD035550	4.4	0
110	Greater committed warming after accounting for the pattern effect. <i>Nature Climate Change</i> , 2021 , 11, 132-136	21.4	8
109	The effect of forced change and unforced variability in heat waves, temperature extremes, and associated population risk in a CO ₂ -warmed world. <i>Atmospheric Chemistry and Physics</i> , 2021 , 21, 11889-11904	6.8	1
108	An Assessment of Climate Feedbacks in Observations and Climate Models Using Different Energy Balance Frameworks. <i>Journal of Climate</i> , 2021 , 1-30	4.4	1
107	Erythemal Radiation, Column Ozone, and the North American Monsoon. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020 , 125, e2019JD032283	4.4	5
106	Influence of convection on stratospheric water vapor in the North American monsoon region. <i>Atmospheric Chemistry and Physics</i> , 2020 , 20, 12153-12161	6.8	5
105	The response of stratospheric water vapor to climate change driven by different forcing agents. <i>Atmospheric Chemistry and Physics</i> , 2020 , 20, 13267-13282	6.8	2
104	Potential Problems Measuring Climate Sensitivity from the Historical Record. <i>Journal of Climate</i> , 2020 , 33, 2237-2248	4.4	10
103	Water Vapor, Clouds, and Saturation in the Tropical Tropopause Layer. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 3984-4003	4.4	27
102	Impact of convectively lofted ice on the seasonal cycle of water vapor in the tropical tropopause layer. <i>Atmospheric Chemistry and Physics</i> , 2019 , 19, 14621-14636	6.8	8
101	Estimating Transient Climate Response in a Large-Ensemble Global Climate Model Simulation. <i>Geophysical Research Letters</i> , 2019 , 46, 311-317	4.9	7
100	Effects of convective ice evaporation on interannual variability of tropical tropopause layer water vapor. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 4425-4437	6.8	7
99	An Estimate of Equilibrium Climate Sensitivity From Interannual Variability. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 8634-8645	4.4	27
98	The influence of internal variability on Earth's energy balance framework and implications for estimating climate sensitivity. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 5147-5155	6.8	28
97	Convective Hydration of the Upper Troposphere and Lower Stratosphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 4583-4593	4.4	24
96	Large anomalies in lower stratospheric water vapour and ice during the 2015-2016 El Niño. <i>Nature Geoscience</i> , 2017 , 10, 405-409	18.3	50

95	Effects of tropical deep convection on interannual variability of tropical tropopause layer water vapor 2017 ,		1
94	Contribution of different processes to changes in tropical lower-stratospheric water vapor in chemistry-climate models. <i>Atmospheric Chemistry and Physics</i> , 2017 , 17, 8031-8044	6.8	16
93	Transport of ice into the stratosphere and the humidification of the stratosphere over the 21 century. <i>Geophysical Research Letters</i> , 2016 , 43, 2323-2329	4.9	37
92	The impact of gravity waves and cloud nucleation threshold on stratospheric water and tropical tropospheric cloud fraction. <i>Earth and Space Science</i> , 2016 , 3, 295-305	3.1	15
91	. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2015 , 12, 597-600	4.1	5
90	The relationship between interannual and long-term cloud feedbacks. <i>Geophysical Research Letters</i> , 2015 , 42, 10,463	4.9	54
89	The impact of temperature vertical structure on trajectory modeling of stratospheric water vapor. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 3517-3526	6.8	15
88	The impact of forcing efficacy on the equilibrium climate sensitivity. <i>Geophysical Research Letters</i> , 2014 , 41, 3565-3568	4.9	30
87	Estimation of the cirrus cloud scattering phase function from satellite observations. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2014 , 138, 36-49	2.1	13
86	Cirrus feedback on interannual climate fluctuations. <i>Geophysical Research Letters</i> , 2014 , 41, 9166-9173	4.9	34
85	Trajectory model simulations of ozone (O ₃) and carbon monoxide (CO) in the lower stratosphere. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 7135-7147	6.8	19
84	Cloud formation, convection, and stratospheric dehydration. <i>Earth and Space Science</i> , 2014 , 1, 1-17	3.1	27
83	Variations of stratospheric water vapor over the past three decades. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014 , 119, 12,588-12,598	4.4	61
82	Stratospheric water vapor feedback. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 18087-91	11.5	167
81	Statistical Properties of Horizontally Oriented Plates in Optically Thick Clouds From Satellite Observations. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2013 , 10, 986-990	4.1	11
80	Observations of Climate Feedbacks over 2000-10 and Comparisons to Climate Models*. <i>Journal of Climate</i> , 2013 , 26, 333-342	4.4	80
79	An Analysis of the Short-Term Cloud Feedback Using MODIS Data. <i>Journal of Climate</i> , 2013 , 26, 4803-4814	4.4	41
78	A Radiative-Convective Equilibrium Perspective of Weakening of the Tropical Walker Circulation in Response to Global Warming. <i>Journal of Climate</i> , 2013 , 26, 1643-1653	4.4	4

77	Modeling upper tropospheric and lower stratospheric water vapor anomalies. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 7783-7793	6.8	23
76	Impact of dataset choice on calculations of the short-term cloud feedback. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 2821-2826	4.4	16
75	Analysis of cirrus in the tropical tropopause layer from CALIPSO and MLS data: A water perspective. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		30
74	Test of the Fixed Anvil Temperature Hypothesis. <i>Journals of the Atmospheric Sciences</i> , 2012 , 69, 2317-2328		21
73	Study of Horizontally Oriented Ice Crystals with CALIPSO Observations and Comparison with Monte Carlo Radiative Transfer Simulations. <i>Journal of Applied Meteorology and Climatology</i> , 2012 , 51, 1426-1439	2.7	39
72	Simulation of stratospheric water vapor and trends using three reanalyses. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 6475-6487	6.8	61
71	A new approach to retrieving cirrus cloud height with a combination of MODIS 1.24- and 1.38- μ m channels. <i>Geophysical Research Letters</i> , 2012 , 39,	4.9	2
70	Cloud variations and the Earth's energy budget. <i>Geophysical Research Letters</i> , 2011 , 38, n/a-n/a	4.9	19
69	Dehydration of the stratosphere. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 8433-8446	6.8	87
68	A determination of the cloud feedback from climate variations over the past decade. <i>Science</i> , 2010 , 330, 1523-7	33.3	156
67	Trends in tropospheric humidity from reanalysis systems. <i>Journal of Geophysical Research</i> , 2010 , 115,		75
66	Contrails and Induced Cirrus. <i>Bulletin of the American Meteorological Society</i> , 2010 , 91, 473-478	6.1	30
65	Distribution and Radiative Forcing of Tropical Thin Cirrus Clouds. <i>Journals of the Atmospheric Sciences</i> , 2009 , 66, 3721-3731	2.1	49
64	Five-Year Climatology of Midtroposphere Dry Air Layers in Warm Tropical Ocean Regions as Viewed by AIRS/Aqua. <i>Journal of Applied Meteorology and Climatology</i> , 2009 , 48, 1831-1842	2.7	12
63	Maintenance of Lower Tropospheric Temperature Inversion in the Saharan Air Layer by Dust and Dry Anomaly. <i>Journal of Climate</i> , 2009 , 22, 5149-5162	4.4	44
62	Estimates of the Water Vapor Climate Feedback during El Niño/Southern Oscillation. <i>Journal of Climate</i> , 2009 , 22, 6404-6412	4.4	30
61	Atmospheric science. A matter of humidity. <i>Science</i> , 2009 , 323, 1020-1	33.3	124
60	Energy for air capture. <i>Nature Geoscience</i> , 2009 , 2, 811-811	18.3	4

59	Clouds and water vapor in the Northern Hemisphere summertime stratosphere. <i>Journal of Geophysical Research</i> , 2009 , 114,		28
58	Tropical tropopause layer. <i>Reviews of Geophysics</i> , 2009 , 47,	23.1	701
57	Long-term variability in Saharan dust transport and its link to North Atlantic sea surface temperature. <i>Geophysical Research Letters</i> , 2008 , 35, n/a-n/a	4.9	26
56	Water-vapor climate feedback inferred from climate fluctuations, 2003–2008. <i>Geophysical Research Letters</i> , 2008 , 35,	4.9	151
55	An analysis of the dependence of clear-sky top-of-atmosphere outgoing longwave radiation on atmospheric temperature and water vapor. <i>Journal of Geophysical Research</i> , 2008 , 113,		15
54	An analysis of the regulation of tropical tropospheric water vapor. <i>Journal of Geophysical Research</i> , 2007 , 112,		34
53	Regulation of H ₂ O and CO in tropical tropopause layer by the Madden-Julian oscillation. <i>Journal of Geophysical Research</i> , 2007 , 112,		21
52	Frequency of tropical precipitating clouds as observed by the Tropical Rainfall Measuring Mission Precipitation Radar and ICESat/Geoscience Laser Altimeter System. <i>Journal of Geophysical Research</i> , 2007 , 112,		13
51	Effects of convective ice lofting on H ₂ O and HDO in the tropical tropopause layer. <i>Journal of Geophysical Research</i> , 2007 , 112,		51
50	Observations of deep convective influence on stratospheric water vapor and its isotopic composition. <i>Geophysical Research Letters</i> , 2007 , 34,	4.9	98
49	. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2006 , 3, 287-291	4.1	9
48	Instantaneous cloud overlap statistics in the tropical area revealed by ICESat/GLAS data. <i>Geophysical Research Letters</i> , 2006 , 33,	4.9	26
47	Tropopause-level thin cirrus coverage revealed by ICESat/Geoscience Laser Altimeter System. <i>Journal of Geophysical Research</i> , 2006 , 111,		44
46	Tropical cloud-top height distributions revealed by the Ice, Cloud, and Land Elevation Satellite (ICESat)/Geoscience Laser Altimeter System (GLAS). <i>Journal of Geophysical Research</i> , 2006 , 111,		62
45	Analysis of the correlations between atmospheric boundary-layer and free-tropospheric temperatures in the tropics. <i>Geophysical Research Letters</i> , 2006 , 33,	4.9	9
44	Principal component analysis of the evolution of the Saharan air layer and dust transport: Comparisons between a model simulation and MODIS and AIRS retrievals. <i>Journal of Geophysical Research</i> , 2006 , 111,		11
43	Multimodel Analysis of the Water Vapor Feedback in the Tropical Upper Troposphere. <i>Journal of Climate</i> , 2006 , 19, 5455-5464	4.4	17
42	Suppression of deep convection over the tropical North Atlantic by the Saharan Air Layer. <i>Geophysical Research Letters</i> , 2005 , 32,	4.9	63

41	UARS/MLS Cloud Ice Measurements: Implications for H ₂ O Transport near the Tropopause. <i>Journals of the Atmospheric Sciences</i> , 2005 , 62, 518-530	2.1	38
40	Effect of convection on the summertime extratropical lower stratosphere. <i>Journal of Geophysical Research</i> , 2004 , 109,		93
39	Water Vapor Feedback in the Tropical Upper Troposphere: Model Results and Observations. <i>Journal of Climate</i> , 2004 , 17, 1272-1282	4.4	83
38	Convective Mixing near the Tropical Tropopause: Insights from Seasonal Variations. <i>Journals of the Atmospheric Sciences</i> , 2003 , 60, 2674-2685	2.1	53
37	A model of HDO in the tropical tropopause layer. <i>Atmospheric Chemistry and Physics</i> , 2003 , 3, 2173-2181	6.8	47
36	Comment on Balloon-borne observations of water vapor and ozone in the tropical upper troposphere and lower stratosphere by H. Vöhl et al.. <i>Journal of Geophysical Research</i> , 2003 , 108,		2
35	The Distribution of Tropical Thin Cirrus Clouds Inferred from Terra MODIS Data. <i>Journal of Climate</i> , 2003 , 16, 1241-1247	4.4	96
34	The effect of deep, tropical convection on the tropical tropopause layer. <i>Journal of Geophysical Research</i> , 2002 , 107, ACH 6-1		89
33	Observations of deep convection in the tropics using the Tropical Rainfall Measuring Mission (TRMM) precipitation radar. <i>Journal of Geophysical Research</i> , 2002 , 107, AAC 17-1		105
32	A Model for Transport across the Tropical Tropopause. <i>Journals of the Atmospheric Sciences</i> , 2001 , 58, 765-779	2.1	164
31	Comparisons between measurements and models of Antarctic ozone loss. <i>Journal of Geophysical Research</i> , 2001 , 106, 3195-3201		14
30	Simulations of tropical upper tropospheric humidity. <i>Journal of Geophysical Research</i> , 2000 , 105, 20155-20163		55
29	On the control of stratospheric humidity. <i>Geophysical Research Letters</i> , 2000 , 27, 2513-2516	4.9	177
28	Determination of the amount of water vapor entering the stratosphere based on Halogen Occultation Experiment (HALOE) data. <i>Journal of Geophysical Research</i> , 1999 , 104, 30605-30607		22
27	Reply [to Comment on A reexamination of the Stratospheric Fountain Hypothesis] by A. E. Dessler. <i>Geophysical Research Letters</i> , 1999 , 26, 2739-2739	4.9	4
26	Satellite observations of temporary and irreversible denitrification. <i>Journal of Geophysical Research</i> , 1999 , 104, 13993-14002		18
25	A reexamination of the Stratospheric fountain hypothesis. <i>Geophysical Research Letters</i> , 1998 , 25, 4165-4168		88
24	Interhemispheric asymmetry in the 1 mbar O ₃ trend: An analysis using an interactive zonal mean model and UARS data. <i>Journal of Geophysical Research</i> , 1998 , 103, 1607-1618		7

23	Selected science highlights from the first 5 years of the Upper Atmosphere Research Satellite (UARS) Program. <i>Reviews of Geophysics</i> , 1998 , 36, 183-210	23.1	34
22	Nitrogen partitioning in the middle stratosphere as observed by the Upper Atmosphere Research Satellite. <i>Journal of Geophysical Research</i> , 1997 , 102, 8955-8965		19
21	Lower stratospheric chlorine partitioning during the decay of the Mt. Pinatubo aerosol cloud. <i>Geophysical Research Letters</i> , 1997 , 24, 1623-1626	4.9	13
20	UARS measurements of ClO and NO ₂ at 40 and 46 km and implications for the model ozone deficit. <i>Geophysical Research Letters</i> , 1996 , 23, 339-342	4.9	27
19	Bulk properties of isentropic mixing into the tropics in the lower stratosphere. <i>Journal of Geophysical Research</i> , 1996 , 101, 9433-9439		69
18	A test of the partitioning between ClO and ClONO ₂ using simultaneous UARS measurements of ClO, NO ₂ , and ClONO ₂ . <i>Journal of Geophysical Research</i> , 1996 , 101, 12515-12521		18
17	Development of the Antarctic ozone hole. <i>Journal of Geophysical Research</i> , 1996 , 101, 20909-20924		17
16	The effects of tropical cirrus clouds on the abundance of lower stratospheric ozone. <i>Journal of Atmospheric Chemistry</i> , 1996 , 23, 209-220	3.2	16
15	In situ observations in aircraft exhaust plumes in the lower stratosphere at midlatitudes. <i>Journal of Geophysical Research</i> , 1995 , 100, 3065		66
14	Correlated observations of HCl and ClONO ₂ from UARS and implications for stratospheric chlorine partitioning. <i>Geophysical Research Letters</i> , 1995 , 22, 1721-1724	4.9	44
13	Measurements of stratospheric carbon dioxide and water vapor at northern midlatitudes: Implications for troposphere-to-stratosphere transport. <i>Geophysical Research Letters</i> , 1995 , 22, 2737-2740	4.9	41
12	Measurements of water vapor in the tropical lower stratosphere during the CEPEX Campaign: Results and interpretation. <i>Geophysical Research Letters</i> , 1995 , 22, 3231-3234	4.9	24
11	Mechanisms controlling water vapor in the lower stratosphere: A tale of two stratospheres. <i>Journal of Geophysical Research</i> , 1995 , 100, 23167		89
10	New fast response photofragment fluorescence hygrometer for use on the NASA ER-2 and the Perseus remotely piloted aircraft. <i>Review of Scientific Instruments</i> , 1994 , 65, 3544-3554	1.7	111
9	SPADE H ₂ O measurements and the seasonal cycle of stratospheric water vapor. <i>Geophysical Research Letters</i> , 1994 , 21, 2559-2562	4.9	40
8	An examination of the total hydrogen budget of the lower stratosphere. <i>Geophysical Research Letters</i> , 1994 , 21, 2563-2566	4.9	71
7	The distribution of hydrogen, nitrogen, and chlorine radicals in the lower stratosphere: Implications for changes in O ₃ due to emission of NO _y from supersonic aircraft. <i>Geophysical Research Letters</i> , 1994 , 21, 2547-2550	4.9	62
6	The diurnal variation of hydrogen, nitrogen, and chlorine radicals: Implications for the heterogeneous production of HNO ₂ . <i>Geophysical Research Letters</i> , 1994 , 21, 2551-2554	4.9	69

5	Balloon-borne in situ measurements of CLO and ozone: Implications for heterogeneous chemistry and mid-latitude ozone loss. <i>Geophysical Research Letters</i> , 1993 , 20, 1795-1798	4.9	34
4	Balloon-borne measurements of CLO, NO, and O3 in a volcanic cloud: An analysis of heterogeneous chemistry between 20 and 30 km. <i>Geophysical Research Letters</i> , 1993 , 20, 2527-2530	4.9	18
3	Simultaneous, in situ measurements of OH, HO2, O3, and H2O: A test of modeled stratospheric HOx chemistry. <i>Geophysical Research Letters</i> , 1990 , 17, 1909-1912	4.9	24
2	Simulation of stratospheric water vapor and trends using three reanalyses		1
1	The impact of temperature resolution on trajectory modeling of stratospheric water vapour		1