Douglas Drob

List of Publications by Year in Descending Order

74 papers	4,986 citations	30 h-index	70 g-index
79 ext. papers	5,804 ext. citations	4.9 avg, IF	5.32 L-index

#	Paper	IF	Citations
74	Comparison of ICON/MIGHTI and TIMED/TIDI Neutral Wind Measurements in the Lower Thermosphere.. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2021JA029904	2.6	4
73	Comparison of a Neutral Density Model With the SET HASDM Density Database. *Space Weather*, **2021**, 19, e2021SW002888	3.7	0
72	On the Effects of Mesospheric and Lower Thermospheric Oxygen Chemistry on the Thermosphere and Ionosphere Semiannual Oscillation. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2020JA028647	2.6	2
71	Observations and Modeling Studies of Solar Eclipse Effects on Oblique High Frequency Radio Propagation. *Space Weather*, **2021**, 19, e2020SW002560	3.7	1
70	NRLMSIS 2.0: A Whole-Atmosphere Empirical Model of Temperature and Neutral Species Densities. *Earth and Space Science*, **2021**, 8, e2020EA001321	3.1	28
69	Coupling From the Middle Atmosphere to the Exobase: Dynamical Disturbance Effects on Light Chemical Species. *Journal of Geophysical Research: Space Physics*, **2020**, 125, e2020JA028331	2.6	6
68	Modeling the Impact of Metallic Ion Layers on Equatorial Spread With SAMI3/ESF. *Geophysical Research Letters*, **2020**, 47, no	4.9	4
67	SAMI3 Simulations of Ionospheric Metallic Layers at Arecibo. *Journal of Geophysical Research: Space Physics*, **2020**, 125, e2019JA027297	2.6	6
66	Oscillations in Neutral Winds Observed by GOCE. *Geophysical Research Letters*, **2020**, 47, e2020GL089339	4.9	1
65	Global Ionospheric Metal Ion Transport With SAMI3. *Geophysical Research Letters*, **2019**, 46, 7937-7944	4.9	17
64	VLF Measurements and Modeling of the D-Region Response to the 2017 Total Solar Eclipse. *IEEE Transactions on Geoscience and Remote Sensing*, **2019**, 57, 7613-7622	8.1	8
63	Determination of Global Mean Eddy Diffusive Transport in the Mesosphere and Lower Thermosphere From Atomic Oxygen and Carbon Dioxide Climatologies. *Journal of Geophysical Research D: Atmospheres*, **2019**, 124, 13519-13533	4.4	6
62	HL-TWiM Empirical Model of High-Latitude Upper Thermospheric Winds. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 10592-10618	2.6	8
61	Nightside Detection of a Large-Scale Thermospheric Wave Generated by a Solar Eclipse. *Geophysical Research Letters*, **2018**, 45, 3366-3373	4.9	23
60	Origins of the Thermosphere-Ionosphere Semiannual Oscillation: Reformulating the "Thermospheric Spoon" Mechanism. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 931-954	2.6	24
59	Seasonal Dependence of Geomagnetic Active-Time Northern High-Latitude Upper Thermospheric Winds. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 739-754	2.6	22
58	Simulation of the 21 August 2017 Solar Eclipse Using the Whole Atmosphere Community Climate Model-eXtended. *Geophysical Research Letters*, **2018**, 45, 3793-3800	4.9	15

57	Evaluating Different Techniques for Constraining Lower Atmospheric Variability in an Upper Atmosphere General Circulation Model: A Case Study During the 2010 Sudden Stratospheric Warming. *Journal of Advances in Modeling Earth Systems*, **2018**, 10, 3076	7.1	6
56	Short-Term and Interannual Variations of Migrating Diurnal and Semidiurnal Tides in the Mesosphere and Lower Thermosphere. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 7106-7123	2.6	26
55	An Intercomparison of VLF and Sounding Rocket Techniques for Measuring the Daytime D Region Ionosphere: Theoretical Implications. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 8688-8697	2.6	5
54	Solar Terminator Waves in Surface Pressure Observations. *Geophysical Research Letters*, **2018**, 45, 5213-5219	4.9	6
53	Direct EUV/X-Ray Modulation of the Ionosphere During the August 2017 Total Solar Eclipse. *Geophysical Research Letters*, **2018**, 45, 3820-3828	4.9	21
52	Seasonal dependence of northern high-latitude upper thermospheric winds: A quiet time climatological study based on ground-based and space-based measurements. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 2619-2644	2.6	24
51	SAMI3 prediction of the impact of the 21 August 2017 total solar eclipse on the ionosphere/plasmasphere system. *Geophysical Research Letters*, **2017**, 44, 5928-5935	4.9	52
50	Investigation of the causes of the longitudinal variation of the electron density in the Weddell Sea Anomaly. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 6562-6583	2.6	14
49	A study of the nonlinear response of the upper atmosphere to episodic and stochastic acoustic-gravity wave forcing. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 1178-1198	2.6	12
48	Middle atmosphere dynamical sources of the semiannual oscillation in the thermosphere and ionosphere. *Geophysical Research Letters*, **2017**, 44, 12-21	4.9	34
47	Global modeling of the low- and middle-latitude ionospheric D and lower E regions and implications for HF radio wave absorption. *Space Weather*, **2017**, 15, 115-130	3.7	10
46	Calculating the absorption of HF radio waves in the ionosphere. *Radio Science*, **2017**, 52, 767-783	1.4	26
45	An update to the Horizontal Wind Model (HWM): The quiet time thermosphere. *Earth and Space Science*, **2015**, 2, 301-319	3.1	327
44	Simulations of the effects of vertical transport on the thermosphere and ionosphere using two coupled models. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 1172-1185	2.6	33
43	Comparison of the neutral wind seasonal variation from midlatitude conjugate observations. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 3029-3035	2.6	9
42	Using physics-based priors in a Bayesian algorithm to enhance infrasound source location. *Geophysical Journal International*, **2014**, 196, 375-385	2.6	18
41	Overview of the 2009 and 2011 Sayarim Infrasound Calibration Experiments. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 6122-6143	4.4	48
40	A 500-kiloton airburst over Chelyabinsk and an enhanced hazard from small impactors. *Nature*, **2013**, 503, 238-41	50.4	275

39	A framework for estimating stratospheric wind speeds from unknown sources and application to the 2010 December 25 bolide. *Geophysical Journal International*, **2013**, 195, 491-503	2.6	14
38	A method for specifying atmospheric gravity wavefields for long-range infrasound propagation calculations. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 3933-3943	4.4	41
37	Atomic oxygen in the mesosphere and lower thermosphere derived from SABER: Algorithm theoretical basis and measurement uncertainty. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 5724-5735	4.4	80
36	Observations of increasing carbon dioxide concentration in Earth thermosphere. *Nature Geoscience*, **2012**, 5, 868-871	18.3	52
35	Coincident thermospheric wind measurements using ground-based Doppler Asymmetric Spatial Heterodyne (DASH) and Fabry Perot Interferometer (FPI) instruments. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2012**, 86, 92-98	2	14
34	Linkages between the cold summer mesopause and thermospheric zonal mean circulation. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	20
33	Infrasound: Connecting the Solid Earth, Oceans, and Atmosphere. *Annual Review of Earth and Planetary Sciences*, **2012**, 40, 327-354	15.3	38
32	On the sensitivity of infrasonic traveltimes in the equatorial region to the atmospheric tides. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		41
31	A Study of Infrasound Propagation Using Dense Seismic Network Recordings of Surface Explosions. *Bulletin of the Seismological Society of America*, **2012**, 102, 1927-1937	2.3	20
30	Inversion of Infrasound Signals for Passive Atmospheric Remote Sensing **2010**, 701-731		43
29	A computationally compact representation of Magnetic-Apex and Quasi-Dipole coordinates with smooth base vectors. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		102
28	A study of acoustic propagation from a large bolide in the atmosphere with a dense seismic network. *Journal of Geophysical Research*, **2010**, 115,		37
27	Source location of the 19 February 2008 Oregon bolide using seismic networks and infrasound arrays. *Journal of Geophysical Research*, **2010**, 115,		27
26	THE SEISMOACOUSTIC WAVEFIELD: A NEW PARADIGM IN STUDYING GEOPHYSICAL PHENOMENA. *Reviews of Geophysics*, **2010**, 48,	23.1	62
25	The Temporal Morphology of Infrasound Propagation. *Pure and Applied Geophysics*, **2010**, 167, 437-453	2.2	46
24	Atmospheric Variability and Infrasound Monitoring **2010**, 475-507		27
23	Contribution of Infrasound Monitoring for Atmospheric Remote Sensing **2010**, 629-646		25
22	Improved horizontal wind model HWM07 enables estimation of equatorial ionospheric electric fields from satellite magnetic measurements. *Geophysical Research Letters*, **2008**, 35,	4.9	17

21	DWM07 global empirical model of upper thermospheric storm-induced disturbance winds. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		99
20	An empirical model of the Earth's horizontal wind fields: HWM07. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		374
19	Evidence for a meteoritic origin of the September 15, 2007, Carancas crater. *Meteoritics and Planetary Science*, **2008**, 43, 1797-1809	2.8	31
18	Evaluation of infrasound signals from the shuttle Atlantis using a large seismic network. *Journal of the Acoustical Society of America*, **2008**, 124, 1442-51	2.2	33
17	A joint seismic and acoustic study of the Washington State bolide: Observations and modeling. *Journal of Geophysical Research*, **2007**, 112,		35
16	On using infrasound from interacting ocean swells for global continuous measurements of winds and temperature in the stratosphere. *Journal of Geophysical Research*, **2006**, 111,		33
15	Infrasound associated with 2004‐2005 large Sumatra earthquakes and tsunami. *Geophysical Research Letters*, **2005**, 32, n/a-n/a	4.9	82
14	Infrasound monitoring of volcanoes to probe high-altitude winds. *Journal of Geophysical Research*, **2005**, 110,		75
13	Probing high-altitude winds using infrasound. *Journal of Geophysical Research*, **2005**, 110,		61
12	On using ocean swells for continuous infrasonic measurements of winds and temperature in the lower, middle, and upper atmosphere. *Geophysical Research Letters*, **2004**, 31,	4.9	62
11	Intraseasonal oscillations in the middle atmosphere forced by gravity waves. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2003**, 65, 1187-1203	2	10
10	Modeling studies with QBO: I. Quasi-decadal oscillation. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2003**, 65, 887-899	2	9
9	Modeling studies with QBO: II. Solar cycle effect. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2003**, 65, 901-916	2	8
8	A theoretical study of the effect of geomagnetic fluctuations and solar tides on the propagation of infrasonic waves in the upper atmosphere. *Geophysical Journal International*, **2002**, 148, 77-87	2.6	21
7	Acoustic propagation and atmosphere characteristics derived from infrasonic waves generated by the Concorde. *Journal of the Acoustical Society of America*, **2002**, 111, 629-41	2.2	67
6	A wide angle and high Mach number parabolic equation. *Journal of the Acoustical Society of America* , **2002**, 111, 729-34	2.2	32
5	NRLMSISE-00 empirical model of the atmosphere: Statistical comparisons and scientific issues. *Journal of Geophysical Research*, **2002**, 107, SIA 15-1-SIA 15-16		2064
4	Ionospheric and dayglow responses to the radiative phase of the Bastille Day flare. *Geophysical Research Letters*, **2002**, 29, 99-1-99-4	4.9	48

3	Response to Comments by R. A. Akmaev on "Mid-latitude temperature at 87-Km: Results from multi-instrument Fourier analysis" *Geophysical Research Letters*, **2001**, 28, 2003-2004	4.9	
2	Enhanced empirical models of the thermosphere. *Physics and Chemistry of the Earth, Part C: Solar, Terrestrial and Planetary Science*, **2000**, 25, 537-542		5
1	Mid-latitude temperatures at 87 km: Results from multi-instrument Fourier analysis. *Geophysical Research Letters*, **2000**, 27, 2109-2112	4.9	10