

# Geraint Vaughan

## List of Publications by Year in descending order

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107  
papers

3,925  
citations

126907

33  
h-index

149698

56  
g-index

121  
all docs

121  
docs citations

121  
times ranked

3754  
citing authors

#	ARTICLE	IF	CITATIONS
1	Convection forced by a descending dry layer and low-level moist convergence. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 2022, 61, 250.	1.7	6
2	Measurement Report: Lidar measurements of stratospheric aerosol following the 2019 Raikoke and Ulawun volcanic eruptions. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 5597-5604.	4.9	17
3	A Midlatitude Climatology and Interannual Variability of 200- and 500-hPa Cut-Off Lows. <i>Journal of Climate</i> , 2020, 33, 2201-2222.	3.2	38
4	A Global Climatology of Tropospheric Inertial Instability. <i>Journals of the Atmospheric Sciences</i> , 2018, 75, 805-825.	1.7	10
5	The North Atlantic Waveguide and Downstream Impact Experiment. <i>Bulletin of the American Meteorological Society</i> , 2018, 99, 1607-1637.	3.3	105
6	Transport of Canadian forest fire smoke over the UK as observed by lidar. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 11375-11388.	4.9	29
7	Observations of ozone-poor air in the tropical tropopause layer. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 5157-5171.	4.9	11
8	Coordinated Airborne Studies in the Tropics (CAST). <i>Bulletin of the American Meteorological Society</i> , 2017, 98, 145-162.	3.3	25
9	The Convective Transport of Active Species in the Tropics (CONTRAST) Experiment. <i>Bulletin of the American Meteorological Society</i> , 2017, 98, 106-128.	3.3	50
10	Early Evolution of the 23 <sup>rd</sup> -26 September 2012 U.K. Floods: Tropical Storm Nadine and Diabatic Heating due to Cloud Microphysics. <i>Monthly Weather Review</i> , 2017, 145, 543-563.	1.4	10
11	Variability of Precipitation along Cold Fronts in Idealized Baroclinic Waves. <i>Monthly Weather Review</i> , 2017, 145, 2971-2992.	1.4	3
12	Near-surface strong winds in a marine extratropical cyclone: acceleration of the winds and the importance of surface fluxes. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2017, 143, 321-332.	2.7	15
13	The 23 <sup>rd</sup> -26 September 2012 U.K. Floods: Using PV Surgery to Quantify Sensitivity to Upper-Level Forcing. <i>Monthly Weather Review</i> , 2017, 145, 4055-4079.	1.4	4
14	Invigoration and Capping of a Convective Rainband ahead of a Potential Vorticity Anomaly. <i>Monthly Weather Review</i> , 2017, 145, 2093-2117.	1.4	6
15	Lidar Observations of Pollution Transport From London to Rural Areas. <i>EPJ Web of Conferences</i> , 2016, 119, 23009.	0.3	1
16	Exploring the Diabatic Role of Ice Microphysical Processes in Two North Atlantic Summer Cyclones. <i>Monthly Weather Review</i> , 2016, 144, 1249-1272.	1.4	28
17	Ozonesonde profiles from the West Pacific Warm Pool: measurements and validation. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 619-634.	4.9	16
18	Acceleration of near-surface strong winds in a dry, idealised extratropical cyclone. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2015, 141, 1004-1016.	2.7	22

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19	Cloud Banding and Winds in Intense European Cyclones: Results from the DIAMET Project. Bulletin of the American Meteorological Society, 2015, 96, 249-265.	3.3	32
20	Evaluation of wind profiles from the NERC MST radar, Aberystwyth, UK. Atmospheric Measurement Techniques, 2014, 7, 3113-3126.	3.1	8
21	Diabatic Heating and Cooling Rates Derived from In Situ Microphysics Measurements: A Case Study of a Wintertime U.K. Cold Front. Monthly Weather Review, 2014, 142, 3100-3125.	1.4	14
22	Precipitation Banding in Idealized Baroclinic Waves. Monthly Weather Review, 2014, 142, 3081-3099.	1.4	4
23	Gravityâ€waveâ€induced perturbations in marine stratocumulus. Quarterly Journal of the Royal Meteorological Society, 2013, 139, 32-45.	2.7	17
24	Numerical simulation of tropical island thunderstorms (Hectors) during the ACTIVE campaign. Meteorological Applications, 2013, 20, 357-370.	2.1	7
25	Can aerosols influence deep tropical convection? Aerosol indirect effects in the <i>Hector</i> island thunderstorm. Quarterly Journal of the Royal Meteorological Society, 2013, 139, 2190-2208.	2.7	13
26	Snowbands over the English Channel and Irish Sea during coldâ€air outbreaks. Quarterly Journal of the Royal Meteorological Society, 2013, 139, 1747-1761.	2.7	28
27	A Five-Year Radar-Based Climatology of Tropopause Folds and Deep Convection over Wales, United Kingdom. Monthly Weather Review, 2013, 141, 1693-1707.	1.4	26
28	Multiple bands near fronts in <sc>VHF</sc> windâ€profiling radar and radiosonde data. Atmospheric Science Letters, 2013, 14, 146-152.	1.9	0
29	Modelling the effects of gravity waves on stratocumulus clouds observed during VOCALS-UK. Atmospheric Chemistry and Physics, 2013, 13, 7133-7152.	4.9	13
30	Aerosol observations and growth rates downwind of the anvil of a deep tropical thunderstorm. Atmospheric Chemistry and Physics, 2012, 12, 6157-6172.	4.9	17
31	Observations and modelling of microphysical variability, aggregation and sedimentation in tropical anvil cirrus outflow regions. Atmospheric Chemistry and Physics, 2012, 12, 6609-6628.	4.9	29
32	Using passive remote sensing to retrieve the vertical variation of cloud droplet size in marine stratocumulus: An assessment of information content and the potential for improved retrievals from hyperspectral measurements. Journal of Geophysical Research, 2012, 117, .	3.3	33
33	Largeâ€scale potential vorticity anomalies and deep convection. Quarterly Journal of the Royal Meteorological Society, 2012, 138, 1627-1639.	2.7	15
34	The VAMOS Ocean-Cloud-Atmosphere-Land Study Regional Experiment (VOCALS-REx): goals, platforms, and field operations. Atmospheric Chemistry and Physics, 2011, 11, 627-654.	4.9	272
35	Classifying fronts in data from a VHF wind-profiling radar. Atmospheric Science Letters, 2011, 12, 375-380.	1.9	5
36	Occluded Fronts and the Occlusion Process: A Fresh Look at Conventional Wisdom. Bulletin of the American Meteorological Society, 2011, 92, 443-466.	3.3	51

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37	A climatology of mid-tropospheric mesoscale strong wind events as observed by the MST radar, Aberystwyth. <i>Meteorological Applications</i> , 2010, 17, 340-354.	2.1	29
38	Lidar and Radar Measurements of the melting layer in the frame of the Convective and Orographically-induced Precipitation Study. , 2009, , .		0
39	Modulation of tropical convection by breaking Rossby waves. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2009, 135, 125-137.	2.7	34
40	Wind profiler observations of a sting jet. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2009, 135, 663-680.	2.7	28
41	Composition of the TTL over Darwin: local mixing or long-range transport?. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 7725-7736.	4.9	20
42	Aerosol and thermodynamic effects on tropical cloud systems during TWIPICE and ACTIVE. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 15-24.	4.9	22
43	Lightning-produced NO <sub>x</sub> during the Northern Australian monsoon; results from the ACTIVE campaign. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 7419-7429.	4.9	10
44	Convective inhibition beneath an upper-level PV anomaly. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2008, 134, 371-383.	2.7	15
45	Aerosol and trace gas measurements in the Darwin area during the wet season. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	49
46	Observations of an atmospheric chemical equator and its implications for the tropical warm pool region. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	31
47	The Tropical Warm Pool International Cloud Experiment. <i>Bulletin of the American Meteorological Society</i> , 2008, 89, 629-646.	3.3	173
48	SCOUT-O3/ACTIVE: High-altitude Aircraft Measurements around Deep Tropical Convection. <i>Bulletin of the American Meteorological Society</i> , 2008, 89, 647-662.	3.3	99
49	FIELD RESEARCH: Characterizing Oceanic Convective Cloud Systems. <i>Bulletin of the American Meteorological Society</i> , 2008, 89, 153-155.	3.3	34
50	The Convective Storm Initiation Project. <i>Bulletin of the American Meteorological Society</i> , 2007, 88, 1939-1956.	3.3	110
51	Inertia-gravity waves observed by the UK MST radar. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2007, 133, 179-188.	2.7	29
52	SAOZ measurements of NO <sub>2</sub> at Aberystwyth. <i>Journal of Environmental Monitoring</i> , 2006, 8, 353.	2.1	10
53	The North Atlantic Marine Boundary Layer Experiment(NAMBLEX). Overview of the campaign held at Mace Head, Ireland, in summer 2002. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 2241-2272.	4.9	65
54	Chemical ozone loss in the Arctic winter 2002/2003 determined with Match. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 2783-2792.	4.9	28

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55	Boundary layer structure and decoupling from synoptic scale flow during NAMBLEX. Atmospheric Chemistry and Physics, 2006, 6, 433-445.	4.9	33
56	Water vapour and ozone profiles in the midlatitude upper troposphere. Atmospheric Chemistry and Physics, 2005, 5, 963-971.	4.9	24
57	Vortex-averaged Arctic ozone depletion in the winter 2002/2003. Atmospheric Chemistry and Physics, 2005, 5, 131-138.	4.9	27
58	The vertical distribution of aerosol over Europe – synthesis of one year of EARLINET aerosol lidar measurements and aerosol transport modeling with LMDzT-INCA. Atmospheric Environment, 2005, 39, 2933-2943.	4.1	47
59	Seasonal, interannual and short-term variability of planetary waves in Met Office stratospheric assimilated fields. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 2445-2458.	2.7	43
60	Convective mixing in a tropopause fold. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 1195-1212.	2.7	42
61	Air mass modification over Europe: EARLINET aerosol observations from Wales to Belarus. Journal of Geophysical Research, 2004, 109, .	3.3	38
62	Aircraft Measurements of a Warm Conveyor Belt – A Case Study. Journal of Atmospheric Chemistry, 2003, 46, 117-129.	3.2	10
63	Long-range transport of Saharan dust to northern Europe: The 11-16 October 2001 outbreak observed with EARLINET. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	229
64	Generation of layering in the lower stratosphere by a breaking Rossby wave. Journal of Geophysical Research, 2002, 107, ACL 7-1.	3.3	11
65	Ozone loss from quasi-conservative coordinate mapping during the 1999 – 2000 SOLVE/THESEO 2000 campaigns. Journal of Geophysical Research, 2002, 107, SOL 16-1.	3.3	9
66	Tracer filamentation generated by small-scale Rossby wave breaking in the lower stratosphere. Journal of Geophysical Research, 2002, 107, ACL 12-1-ACL 12-14.	3.3	12
67	Observation of gravity wave generation and breaking in the lowermost stratosphere. Journal of Geophysical Research, 2001, 106, 5173-5179.	3.3	57
68	SAOZ measurements of total ozone at Aberystwyth. Journal of Quantitative Spectroscopy and Radiative Transfer, 2001, 69, 231-243.	2.3	1
69	Observations of Streamers in the Troposphere and Stratosphere Using Ozone Lidar. Journal of Atmospheric Chemistry, 2001, 38, 295-315.	3.2	13
70	Fine-scale layering on the edge of a stratospheric intrusion. Atmospheric Environment, 2001, 35, 2215-2221.	4.1	9
71	Combined characterisation of GOME and TOMS total ozone measurements from space using ground-based observations from the NDSC. Advances in Space Research, 2000, 26, 1931-1940.	2.6	31
72	Persistence of stratospheric ozone layers in the troposphere. Atmospheric Environment, 2000, 34, 2563-2570.	4.1	61

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73	Effects of humidity and precipitation on VHF radar vertical beam echoes. <i>Radio Science</i> , 2000, 35, 1389-1398.	1.6	17
74	A strange cloud in the Arctic summer stratosphere 1998 above Esrange (68°N), Sweden. <i>Annales Geophysicae</i> , 2000, 18, 505-509.	1.6	7
75	Decay of a cut-off low and contribution to stratosphere-troposphere exchange. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2000, 126, 1117-1141.	2.7	6
76	Break-up of a stratospheric streamer observed by MST radar. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2000, 126, 1751-1769.	2.7	4
77	Observations of subtropical air in the European mid-latitude lower stratosphere. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1999, 125, 2965-2986.	2.7	2
78	Title is missing!. <i>Journal of Atmospheric Chemistry</i> , 1998, 29, 55-83.	3.2	66
79	Detection of turbulence around jet streams using a VHF radar. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1998, 124, 447-462.	2.7	33
80	Transport of near-tropopause air into the lower midlatitude stratosphere. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1998, 124, 1559-1578.	2.7	64
81	Analysis of an ex-tropical cyclone after its reintensification as a warm-core extratropical cyclone. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1998, 124, 2329-2356.	2.7	46
82	Observation of near-zero ozone concentrations in the upper troposphere at mid-latitudes. <i>Geophysical Research Letters</i> , 1998, 25, 1173-1176.	4.0	25
83	Chemical air mass differences near fronts. <i>Journal of Geophysical Research</i> , 1998, 103, 13413-13434.	3.3	83
84	Accuracy of measurements of total ozone by a SAOZ ground-based zenith sky visible spectrometer. <i>Journal of Geophysical Research</i> , 1997, 102, 1379-1390.	3.3	27
85	An intercomparison of ground-based UV-visible sensors of ozone and NO <sub>2</sub> . <i>Journal of Geophysical Research</i> , 1997, 102, 1411-1422.	3.3	43
86	Interpretation of ozone measurements by ground-based visible spectroscopy—a study of the seasonal dependence of airmass factors for ozone based on climatology data. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 1997, 57, 569-579.	2.3	9
87	Accuracy of ozonesonde measurements in the troposphere. <i>Journal of Atmospheric Chemistry</i> , 1996, 25, 215-226.	3.2	40
88	A comparison of ozone and thermal tropopause heights and the impact of tropopause definition on quantifying the ozone content of the troposphere. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1996, 122, 929-944.	2.7	164
89	Use of MST radars to probe the mesoscale structure of the tropopause. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 1995, 47, 759-765.	1.7	19
90	Transport into the troposphere in a tropopause fold. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1994, 120, 1085-1103.	2.7	79

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91	Distribution of ozone laminae during EASOE and the possible influence of inertia-gravity waves. <i>Geophysical Research Letters</i> , 1994, 21, 1479-1482.	4.0	74
92	Removal of meteorological synoptic-scale disturbances from TOMS total ozone fields. <i>Geophysical Research Letters</i> , 1994, 21, 1475-1478.	4.0	6
93	Latitudinal distribution of stratospheric aerosols during the EASOE winter 1991/92. <i>Geophysical Research Letters</i> , 1994, 21, 1283-1286.	4.0	22
94	Lidar measurements of Mt. Pinatubo aerosols at Aberystwyth from August 1991 through March 1992. <i>Geophysical Research Letters</i> , 1994, 21, 1315-1318.	4.0	21
95	The potential for stratosphere-troposphere exchange in cut-off-low systems. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1993, 119, 343-365.	2.7	130
96	Occurrence of ozone laminae near the boundary of the stratospheric polar vortex. <i>Journal of Geophysical Research</i> , 1993, 98, 8883-8890.	3.3	49
97	The distribution and size of laminae of enhanced and depleted ozone in the lower stratosphere. <i>Advances in Space Research</i> , 1992, 12, 177-180.	2.6	0
98	On the relation between total ozone and meteorology. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1991, 117, 1281-1298.	2.7	101
99	Humidity measurements in the free troposphere using Raman backscatter. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1988, 114, 1471-1484.	2.7	86
100	Dynamical influences on stratospheric aerosols observed at Aberystwyth in early 1983. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 1987, 39, 398-411.	1.6	2
101	Upper stratospheric and mesospheric temperatures derived from lidar observations at Aberystwyth. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 1987, 49, 287-298.	0.9	35
102	Solar tides in the middle atmosphere. I: Description of satellite observations and comparison with theoretical calculations at equinox. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1985, 111, 677-689.	2.7	9
103	Atmospheric measurements of peroxyacetyl nitrate (PAN) in rural, south-east England: Seasonal variations winter photochemistry and long-range transport. <i>Atmospheric Environment</i> , 1984, 18, 2691-2702.	1.0	57
104	Vertical profiles of tropospheric gases: Chemical consequences of stratospheric intrusions. <i>Atmospheric Environment</i> , 1984, 18, 1759-1766.	1.0	66
105	Air sampling flights round the British Isles at low altitudes: SO <sub>2</sub> oxidation and removal rates. <i>Atmospheric Environment</i> , 1984, 18, 1777-1790.	1.0	16
106	Mesospheric ozone-theory and observation. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1984, 110, 239-260.	2.7	12
107	Diurnal variation of mesospheric ozone. <i>Nature</i> , 1982, 296, 133-135.	27.8	39