Richard Forbes

List of Publications by Year
in descending order

47 papers	12,837 citations	236925 25 h-index	214800 47 g-index
56 all docs	56 docs citations	56 times ranked	11506 citing authors

#	Article	IF	Citations
1	Demistify: a large-eddy simulation (LES) and single-column model (SCM) intercomparison of radiation fog. Atmospheric Chemistry and Physics, 2022, 22, 319-333.	4.9	14
2	The future of Earth system prediction: Advances in model-data fusion. Science Advances, 2022, 8, eabn3488.	10.3	35
3	Characterising extratropical nearâ€tropopause analysis humidity biases and their radiative effects on temperature forecasts. Quarterly Journal of the Royal Meteorological Society, 2021, 147, 3878-3898.	2.7	7
4	Revision of the Stochastically Perturbed Parametrisations model uncertainty scheme in the Integrated Forecasting System. Quarterly Journal of the Royal Meteorological Society, 2021, 147, 1364-1381.	2.7	20
5	The ERA5 global reanalysis. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 1999-2049.	2.7	10,272
6	Parametrizing cloud geometry and its application in a subgrid cloudâ€edge erosion scheme. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 1651-1667.	2.7	8
7	The sensitivity of atmospheric blocking to upstream latent heating â€" numerical experiments. Weather and Climate Dynamics, 2020, 1, 405-426.	3.5	31
8	Quantifying the role of individual diabatic processes for the formation of PV anomalies in a North Pacific cyclone. Quarterly Journal of the Royal Meteorological Society, 2019, 145, 2454-2476.	2.7	17
9	Modification of Potential Vorticity near the Tropopause by Nonconservative Processes in the ECMWF Model. Journals of the Atmospheric Sciences, 2019, 76, 1709-1726.	1.7	25
10	CAUSES: Attribution of Surface Radiation Biases in NWP and Climate Models near the U.S. Southern Great Plains. Journal of Geophysical Research D: Atmospheres, 2018, 123, 3612-3644.	3.3	62
11	The Numerics of Physical Parametrization in the ECMWF Model. Frontiers in Earth Science, 2018, 6, .	1.8	28
12	Introduction to CAUSES: Description of Weather and Climate Models and Their Nearâ€Surface Temperature Errors in 5Âday Hindcasts Near the Southern Great Plains. Journal of Geophysical Research D: Atmospheres, 2018, 123, 2655-2683.	3.3	53
13	Comment on â€œSurface Air Relative Humidities Spuriously Exceeding 100% in CMIP5 Model Output and Their Impact on Future Projectionsâ€• by K. Ruosteenoja et al. (2017). Journal of Geophysical Research D: Atmospheres, 2018, 123, 8724-8727.	3.3	2
14	Building the Next Generation of Climate Modelers: Scale-Aware Physics Parameterization and the â€œGrey Zoneâ€• Challenge. Bulletin of the American Meteorological Society, 2018, 99, ES185-ES189.	3.3	5
15	Understanding Global Model Systematic Shortwave Radiation Errors in Subtropical Marine Boundary Layer Cloud Regimes. Journal of Advances in Modeling Earth Systems, 2018, 10, 2042-2060.	3.8	7
16	CAUSES: On the Role of Surface Energy Budget Errors to the Warm Surface Air Temperature Error Over the Central United States. Journal of Geophysical Research D: Atmospheres, 2018, 123, 2888-2909.	3.3	60
17	Using satellite and reanalysis data to evaluate the representation of latent heating in extratropical cyclones in a climate model. Climate Dynamics, 2017, 48, 2255-2278.	3.8	27
18	Katabatic winds diminish precipitation contribution to the Antarctic ice mass balance. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10858-10863.	7.1	72

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19	Stochastic representations of model uncertainties at ECMWF: state of the art and future vision. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 2315-2339.	2.7	170
20	Towards processâ€level representation of model uncertainties: stochastically perturbed parametrizations in the ECMWF ensemble. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 408-422.	2.7	89
21	Why are mixedâ€phase altocumulus clouds poorly predicted by largeâ€scale models? Part 2. Vertical resolution sensitivity and parameterization. Journal of Geophysical Research D: Atmospheres, 2017, 122, 9927-9944.	3.3	15
22	Why are mixedâ€phase altocumulus clouds poorly predicted by largeâ€scale models? Part 1. Physical processes. Journal of Geophysical Research D: Atmospheres, 2017, 122, 9903-9926.	3.3	26
23	Regime dependence of ice cloud heterogeneity â€“ a convective lifeâ€cycle effect?. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 3259-3268.	2.7	3
24	Impact of different IFS microphysics on a warm conveyor belt and the downstream flow evolution. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 2727-2739.	2.7	46
25	Regime dependence of cloud condensate variability observed at the Atmospheric Radiation Measurement Sites. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 1605-1617.	2.7	10
26	Summer Arctic clouds in the <scp>ECMWF</scp> forecast model: an evaluation of cloud parametrization schemes. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 387-400.	2.7	46
27	ARMâ€™s Impact on Numerical Weather Prediction at ECMWF. Meteorological Monographs, 2016, 57, 28.1-28.13.	5.0	13
28	Comparison of <scp>ECMWF</scp> analysis and forecast humidity data with <scp>CARIBIC</scp> upper troposphere and lower stratosphere observations. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 833-844.	2.7	40
29	Characterizing the radiative impacts of precipitating snow in the ECMWF Integrated Forecast System global model. Journal of Geophysical Research D: Atmospheres, 2014, 119, 9626-9637.	3.3	19
30	Improving the Representation of Low Clouds and Drizzle in the ECMWF Model Based on ARM Observations from the Azores. Monthly Weather Review, 2014, 142, 668-685.	1.4	58
31	Global versus Local MJO Forecast Skill of the ECMWF Model during DYNAMO. Monthly Weather Review, 2014, 142, 2228-2247.	1.4	56
32	On the Representation of High-Latitude Boundary Layer Mixed-Phase Cloud in the ECMWF Global Model. Monthly Weather Review, 2014, 142, 3425-3445.	1.4	98
33	Comparison of Fast In situ Stratospheric Hygrometer (FISH) measurements of water vapor in the upper troposphere and lower stratosphere (UTLS) with ECMWF (re)analysis data. Atmospheric Chemistry and Physics, 2014, 14, 10803-10822.	4.9	27
34	Diagnosing the average spatio-temporal impact of convective systems â€“ Part 2: A model intercomparison using satellite data. Atmospheric Chemistry and Physics, 2014, 14, 8701-8721.	4.9	3
35	Diagnosing the average spatio-temporal impact of convective systems â€“ Part 1: A methodology for evaluating climate models. Atmospheric Chemistry and Physics, 2013, 13, 12043-12058.	4.9	2
36	The Impact of Low Clouds on Surface Shortwave Radiation in the ECMWF Model. Monthly Weather Review, 2012, 140, 3783-3794.	1.4	28

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37	Interpreting an evaluation of the ECMWF global model with CloudSat observations: ambiguities due to radar reflectivity forward operator uncertainties. Quarterly Journal of the Royal Meteorological Society, 2012, 138, 2047-2065.	2.7	28
38	Evaluation of ice cloud representation in the ECMWF and UK Met Office models using CloudSat and CALIPSO data. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 2064-2078.	2.7	55
39	The ECMWF reâ€analysis for the AMMA observational campaign. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 1457-1472.	2.7	42
40	Dreary state of precipitation in global models. Journal of Geophysical Research, 2010, 115, .	3.3	533
41	Fog prediction using a very high resolution numerical weather prediction model forced with a single profile. Meteorological Applications, 2009, 16, 129-141.	2.1	8
42	Characteristics of High-Resolution Versions of the Met Office Unified Model for Forecasting Convection over the United Kingdom. Monthly Weather Review, 2008, 136, 3408-3424.	1.4	330
43	The Convective Storm Initiation Project. Bulletin of the American Meteorological Society, 2007, 88, 1939-1956.	3.3	110
44	Daytime convective development over land: A model intercomparison based on LBA observations. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 317-344.	2.7	160
45	Observations of the depth of ice particle evaporation beneath frontal cloud to improve NWP modelling. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 865-883.	2.7	11
46	Sensitivity of extratropical cyclone mesoscale structure to the parametrization of ice microphysical processes. Quarterly Journal of the Royal Meteorological Society, 2003, 129, 1123-1148.	2.7	37
47	Dynamical effects of ice sublimation in a frontal wave. Quarterly Journal of the Royal Meteorological Society, 2000, 126, 2405-2434.	2.7	24