Philippe Lopez

List of Publications by Year
in descending order

33 papers	12,332 citations	257450 24 h-index	434195 31 g-index
33 all docs	33 docs citations	33 times ranked	10608 citing authors

#	Article	IF	Citations
1	The ERA5 global reanalysis. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 1999-2049.	2.7	10,272
2	Representing Equilibrium and Nonequilibrium Convection in Large-Scale Models. Journals of the Atmospheric Sciences, 2014, 71, 734-753.	1.7	305
3	Direct 4D-Var assimilation of all-sky radiances. Part I: Implementation. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 1868-1885.	2.7	172
4	Project to Intercompare Regional Climate Simulations (PIRCS): Description and initial results. Journal of Geophysical Research, 1999, 104, 19443-19461.	3.3	169
5	Assimilation and Modeling of the Atmospheric Hydrological Cycle in the ECMWF Forecasting System. Bulletin of the American Meteorological Society, 2005, 86, 387-402.	3.3	143
6	Characteristics of Occasional Poor Medium-Range Weather Forecasts for Europe. Bulletin of the American Meteorological Society, 2013, 94, 1393-1405.	3.3	139
7	Implementation of 1D+4D-Var assimilation of precipitation-affected microwave radiances at ECMWF. I: 1D-Var. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 2277-2306.	2.7	102
8	Direct 4D-Var assimilation of all-sky radiances. Part II: Assessment. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 1886-1905.	2.7	93
9	Implementation and validation of a new prognostic large-scale cloud and precipitation scheme for climate and data-assimilation purposes. Quarterly Journal of the Royal Meteorological Society, 2002, 128, 229-257.	2.7	92
10	Direct 4D-Var Assimilation of NCEP Stage IV Radar and Gauge Precipitation Data at ECMWF. Monthly Weather Review, 2011, 139, 2098-2116.	1.4	92
11	Implementation of 1D+4D-Var assimilation of precipitation-affected microwave radiances at ECMWF. II: 4D-Var. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 2307-2332.	2.7	85
12	A convection scheme for data assimilation: Description and initial tests. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 409-436.	2.7	58
13	The capability of 4D-Var systems to assimilate cloud-affected satellite infrared radiances. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 917-932.	2.7	57
14	A Baseline for Global Weather and Climate Simulations at 1 km Resolution. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002192.	3.8	54
15	Variational retrieval of temperature and humidity profiles using rain rates versus microwave brightness temperatures. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 827-852.	2.7	49
16	Cloud and Precipitation Parameterizations in Modeling and Variational Data Assimilation: A Review. Journals of the Atmospheric Sciences, 2007, 64, 3766-3784.	1.7	46
17	â€œ1D+4DVARâ€•Assimilation of NCEP Stage-IV Radar and Gauge Hourly Precipitation Data at ECMWF. Monthly Weather Review, 2007, 135, 2506-2524.	1.4	46
18	Lessons learnt from the operational 1D + 4Dâ€Var assimilation of rainâ€•and cloudâ€affected SSM/I observations at ECMWF. Quarterly Journal of the Royal Meteorological Society, 2008, 134, 1513-1525.	2.7	46

#	Article	IF	Citations
19	A 5-yr 40-km-Resolution Global Climatology of Superrefraction for Ground-Based Weather Radars. Journal of Applied Meteorology and Climatology, 2009, 48, 89-110.	1.5	45
20	A Lightning Parameterization for the ECMWF Integrated Forecasting System. Monthly Weather Review, 2016, 144, 3057-3075.	1.4	45
21	Impact of SSM/I Observations Related to Moisture, Clouds, and Precipitation on Global NWP Forecast Skill. Monthly Weather Review, 2008, 136, 2713-2726.	1.4	34
22	Experimental use of TRMM precipitation radar observations in 1D+4D-Var assimilation. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 2473-2495.	2.7	29
23	Using machine learning to predict fireâ€ignition occurrences from lightning forecasts. Meteorological Applications, 2021, 28, e1973.	2.1	27
24	Linearized Physics for Data Assimilation at ECMWF. , 2013, , 251-286.		27
25	Experimental 4D-Var Assimilation of SYNOP Rain Gauge Data at ECMWF. Monthly Weather Review, 2013, 141, 1527-1544.	1.4	25
26	Climatology of radar anomalous propagation over West Africa. Journal of Atmospheric and Solar-Terrestrial Physics, 2015, 123, 1-12.	1.6	20
27	Experimental 2D-Var assimilation of ARM cloud and precipitation observations. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 1325-1347.	2.7	19
28	Experimental 1D + 4Dâ€Var assimilation of CloudSat observations. Quarterly Journal of the Royal Meteorological Society, 2012, 138, 1196-1220.	2.7	18
29	Validation and intercomparison of three mesoscale models on three FASTEX cloud systems: Comparison with coarse-resolution simulations. Quarterly Journal of the Royal Meteorological Society, 2003, 129, 1841-1871.	2.7	12
30	The Inclusion of 3D Prognostic Cloud and Precipitation Variables in Adjoint Calculations. Monthly Weather Review, 2003, 131, 1953-1974.	1.4	7
31	Forecasting the Past: Views of Earth from the Moon and Beyond. Bulletin of the American Meteorological Society, 2020, 101, E1190-E1200.	3.3	3
32	A Lagrangian Advection Scheme Using Tracer Points. Atmosphere - Ocean, 1997, 35, 171-194.	1.6	1
33	The European Centre for Medium-Range Weather Forecasts Global Rainfall Data Assimilation Experimentation. , 2007, , 447-457.		0