Jean Pierre Chaboureau

List of Publications by Year
in descending order

114 papers	4,390 citations	94433 37 h-index	128289 60 g-index
143 all docs	143 docs citations	143 times ranked	4125 citing authors

#	Article	IF	Citations
1	Representing Equilibrium and Nonequilibrium Convection in Large-Scale Models. Journals of the Atmospheric Sciences, 2014, 71, 734-753.	1.7	305
2	The simulation of the diurnal cycle of convective precipitation over land in a global model. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 3119-3137.	2.7	242
3	Modelling the diurnal cycle of deep precipitating convection over land with cloud-resolving models and single-column models. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 3139-3172.	2.7	212
4	Overview of the Meso-NH model version 5.4 and its applications. Geoscientific Model Development, 2018, 11, 1929-1969.	3.6	194
5	Airborne observations of the impact of a convective system on the planetary boundary layer thermodynamics and aerosol distribution in the inter-tropical discontinuity region of the West African Monsoon. Quarterly Journal of the Royal Meteorological Society, 2007, 133, 1175-1189.	2.7	143
6	Towards IASI-New Generation (IASI-NG): impact of improved spectral resolution and radiometric noise on the retrieval of thermodynamic, chemistry and climate variables. Atmospheric Measurement Techniques, 2014, 7, 4367-4385.	3.1	110
7	A comparison of TWPâ€ICE observational data with cloudâ€resolving model results. Journal of Geophysical Research, 2012, 117, .	3.3	108
8	A numerical study of tropical cross-tropopause transport by convective overshoots. Atmospheric Chemistry and Physics, 2007, 7, 1731-1740.	4.9	101
9	Evaluation of cloudâ€resolving and limited area model intercomparison simulations using TWPâ€ICE observations: 1. Deep convective updraft properties. Journal of Geophysical Research D: Atmospheres, 2014, 119, 13,891.	3.3	100
10	The Chuva Project: How Does Convection Vary across Brazil?. Bulletin of the American Meteorological Society, 2014, 95, 1365-1380.	3.3	100
11	Evaluation of cloud-resolving model intercomparison simulations using TWP-ICE observations: Precipitation and cloud structure. Journal of Geophysical Research, 2011, 116, .	3.3	90
12	Characteristics of the TOVS Pathfinder Path-B Dataset. Bulletin of the American Meteorological Society, 1999, 80, 2679-2701.	3.3	86
13	Clouds and Convective Selfâ€Aggregation in a Multimodel Ensemble of Radiativeâ€Convective Equilibrium Simulations. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002138.	3.8	86
14	The role of stability and moisture in the diurnal cycle of convection over land. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 3105-3117.	2.7	79
15	Tropical transition of a Mediterranean storm by jet crossing. Quarterly Journal of the Royal Meteorological Society, 2012, 138, 596-611.	2.7	68
16	Dust emission and transport over Iraq associated with the summer Shamal winds. Aeolian Research, 2017, 24, 15-31.	2.7	66
17	Diurnal cycle of dust and cirrus over West Africa as seen from Meteosat Second Generation satellite and a regional forecast model. Geophysical Research Letters, 2007, 34, .	4.0	65
18	Summertime dust storms over the Arabian Peninsula and impacts on radiation, circulation, cloud development and rain. Atmospheric Research, 2021, 250, 105364.	4.1	61

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19	The Aerosols, Radiation and Clouds in Southern Africa Field Campaign in Namibia: Overview, Illustrative Observations, and Way Forward. Bulletin of the American Meteorological Society, 2019, 100, 1277-1298.	3.3	59
20	A Simple Cloud Parameterization Derived from Cloud Resolving Model Data: Diagnostic and Prognostic Applications. Journals of the Atmospheric Sciences, 2002, 59, 2362-2372.	1.7	59
21	Statistical representation of clouds in a regional model and the impact on the diurnal cycle of convection during Tropical Convection, Cirrus and Nitrogen Oxides (TROCCINOX). Journal of Geophysical Research, 2005, 110, .	3.3	58
22	Biogenic nitrogen oxide emissions from soils â€" impact on NO_x and ozone over West Africa during AMMA (African Monsoon Multidisciplinary Experiment): modelling study. Atmospheric Chemistry and Physics, 2008, 8, 2351-2363.	4.9	55
23	The impact of a mesoscale convective system cold pool on the northward propagation of the intertropical discontinuity over West Africa. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 139-159.	2.7	54
24	Remote sensing of the vertical distribution of atmospheric water vapor from the TOVS observations: Method and validation. Journal of Geophysical Research, 1998, 103, 8743-8752.	3.3	53
25	Mediterranean hurricanes: large-scale environment and convective and precipitating areas from satellite microwave observations. Natural Hazards and Earth System Sciences, 2010, 10, 2199-2213.	3.6	49
26	Initiation of deep convection at marginal instability in an ensemble of mesoscale models: a caseâ€study from COPS. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 118-136.	2.7	49
27	The Role of the Intertropical Discontinuity Region and the Heat Low in Dust Emission and Transport Over the Thar Desert, India: A Premonsoon Case Study. Journal of Geophysical Research D: Atmospheres, 2019, 124, 13197-13219.	3.3	49
28	Longâ€range transport of Saharan dust and its radiative impact on precipitation forecast: a case study during the Convective and Orographicallyâ€induced Precipitation Study (COPS). Quarterly Journal of the Royal Meteorological Society, 2011, 137, 236-251.	2.7	48
29	Comparison between the Large-Scale Environments of Moderate and Intense Precipitating Systems in the Mediterranean Region. Monthly Weather Review, 2009, 137, 3933-3959.	1.4	47
30	Evaluation of cloudâ€resolving and limited area model intercomparison simulations using TWPâ€ICE observations: 2. Precipitation microphysics. Journal of Geophysical Research D: Atmospheres, 2014, 119, 13,919.	3.3	47
31	Evaluation of a cloud system life-cycle simulated by the Meso-NH model during FASTEX using METEOSAT radiances and TOVS-3i cloud retrievals. Quarterly Journal of the Royal Meteorological Society, 2000, 126, 1735-1750.	2.7	46
32	Impact of initial condition uncertainties on the predictability of heavy rainfall in the Mediterranean: a case study. Quarterly Journal of the Royal Meteorological Society, 2008, 134, 1775-1788.	2.7	44
33	Dust impact on the West African heat low in summertime. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 1227-1240.	2.7	44
34	Mesoscale model cloud scheme assessment using satellite observations. Journal of Geophysical Research, 2002, 107, AAC 8-1.	3.3	42
35	Radiative Transfer Simulations Using Mesoscale Cloud Model Outputs: Comparisons with Passive Microwave and Infrared Satellite Observations for Midlatitudes. Journals of the Atmospheric Sciences, 2007, 64, 1550-1568.	1.7	42
36	Verification of Cloud Cover Forecast with Satellite Observation over West Africa. Monthly Weather Review, 2008, 136, 4421-4434.	1.4	42

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37	Validation of a cirrus parameterization with Meteosat Second Generation observations. Geophysical Research Letters, 2006, 33, .	4.0	41
38	Estimate of Sahelian dust emissions in the intertropical discontinuity region of the West African Monsoon. Journal of Geophysical Research, 2009, 114, .	3.3	41
39	Injection in the lower stratosphere of biomass fire emissions followed by long-range transport: a MOZAIC case study. Atmospheric Chemistry and Physics, 2009, 9, 5829-5846.	4.9	41
40	Polar Lows over the Nordic Seas: Improved Representation in ERA-Interim Compared to ERA-40 and the Impact on Downscaled Simulations. Monthly Weather Review, 2014, 142, 2271-2289.	1.4	40
41	Largeâ€eddy simulations of Hector the convector making the stratosphere wetter. Atmospheric Science Letters, 2015, 16, 135-140.	1.9	39
42	A Midlatitude Precipitating Cloud Database Validated with Satellite Observations. Journal of Applied Meteorology and Climatology, 2008, 47, 1337-1353.	1.5	38
43	Potential of Advanced Microwave Sounding Unit to identify precipitating systems and associated upperâ€level features in the Mediterranean region: Case studies. Journal of Geophysical Research, 2007, 112, .	3.3	37
44	Modeling of passive microwave responses in convective situations using output from mesoscale models: Comparison with TRMM/TMI satellite observations. Journal of Geophysical Research, 2004, 109, n/a-n/a.	3.3	36
45	On the role of a Rossby wave train during the extratropical transition of hurricane <i>Helene</i> (2006). Quarterly Journal of the Royal Meteorological Society, 2013, 139, 370-386.	2.7	36
46	Polar Jet Associated Circulation Triggered a Saharan Cyclone and Derived the Poleward Transport of the African Dust Generated by the Cyclone. Journal of Geophysical Research D: Atmospheres, 2018, 123, 11,899.	3.3	33
47	Multiâ€platform observations of a springtime case of BodÃ©lÃ© and Sudan dust emission, transport and scavenging over West Africa. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 413-430.	2.7	30
48	Satellite-based climatology of Mediterranean cloud systems and their association with large-scale circulation. Journal of Geophysical Research, 2006, 111, .	3.3	29
49	Longâ€range transport of Saharan dust over northwestern Europe during EUCAARI 2008 campaign: Evolution of dust optical properties by scavenging. Journal of Geophysical Research, 2012, 117, .	3.3	28
50	Atmospheric Dynamics from Synoptic to Local Scale During an Intense Frontal Dust Storm over the Sistan Basin in Winter 2019. Geosciences (Switzerland), 2019, 9, 453.	2.2	28
51	A generalization of CAPE into potential-energy convertibility. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 861-875.	2.7	27
52	Effect of Turbulence Parameterization on Assessment of Cloud Organization. Monthly Weather Review, 2015, 143, 3246-3262.	1.4	27
53	Development of precipitation retrievals at millimeter and subâ€millimeter wavelengths for geostationary satellites. Journal of Geophysical Research, 2008, 113, .	3.3	26
54	The Mechanisms Leading to a Stratospheric Hydration by Overshooting Convection. Journals of the Atmospheric Sciences, 2018, 75, 4383-4398.	1.7	26

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55	A high resolution climatology of precipitation and deep convection over the Mediterranean region from operational satellite microwave data: development and application to the evaluation of model uncertainties. Natural Hazards and Earth System Sciences, 2012, 12, 785-798.	3.6	25
56	Giga-LES of Hector the Convector and Its Two Tallest Updrafts up to the Stratosphere. Journals of the Atmospheric Sciences, 2016, 73, 5041-5060.	1.7	25
57	Frontogenesis and the development of secondary wave cyclones in FASTEX. Quarterly Journal of the Royal Meteorological Society, 1999, 125, 925-940.	2.7	24
58	Characterization of dust emission from alluvial sources using aircraft observations and highâ€resolution modeling. Journal of Geophysical Research D: Atmospheres, 2013, 118, 7237-7259.	3.3	24
59	Remote impact of North Atlantic hurricanes on the Mediterranean during episodes of intense rainfall in autumn 2012. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 967-978.	2.7	23
60	HAMSTRAD-Tropo, A 183-GHz Radiometer Dedicated to Sound Tropospheric Water Vapor Over Concordia Station, Antarctica. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 1365-1380.	6.3	22
61	Fennec dust forecast intercomparison over the Sahara in June 2011. Atmospheric Chemistry and Physics, 2016, 16, 6977-6995.	4.9	21
62	High resolution numerical study of the Algiers 2001 flash flood: sensitivity to the upper-level potential vorticity anomaly. Advances in Geosciences, 0, 7, 251-257.	12.0	21
63	A 6â€year AMSUâ€based climatology of upperâ€level troughs and associated precipitation distribution in the Mediterranean region. Journal of Geophysical Research, 2008, 113, .	3.3	20
64	Modelling convective processes during the suppressed phase of a Maddenâ€"Julian oscillation: Comparing singleâ€column models with cloudâ€resolving models. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 333-353.	2.7	20
65	Forecasting summer convection over the Black Forest: a case study from the Convective and Orographicallyâ€induced Precipitation Study (COPS) experiment. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 101-117.	2.7	19
66	Severe convection in the Mediterranean from microwave observations and a convectionâ€permitting model. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 43-55.	2.7	19
67	Projet Cyprim, partie I : CyclogenÃ¨ses et prÃ©cipitations intenses en rÃ©gion mÃ©diterranÃ©enne : origines et caractÃ©ristiques. La MÃ©tÃ©orologie, 2009, 8, 18.	0.5	19
68	Regional lightning NO_x sources during the TROCCINOX experiment. Atmospheric Chemistry and Physics, 2006, 6, 5559-5572.	4.9	18
69	Improving the numerical prediction of a cyclone in the Mediterranean by local potential vorticity modifications. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 865-879.	2.7	17
70	Predictability of a Mediterranean Tropical-Like Storm Downstream of the Extratropical Transition of Hurricane Helene (2006). Monthly Weather Review, 2013, 141, 1943-1962.	1.4	17
71	Convective hydration in the tropical tropopause layer during the StratoClim aircraft campaign: pathway of an observed hydration patch. Atmospheric Chemistry and Physics, 2019, 19, 11803-11820.	4.9	17
72	A meandering polar jet caused the development of a Saharan cyclone and the transport of dust toward Greenland. Advances in Science and Research, 0, 16, 49-56.	1.0	16

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73	Patterns of Precipitation and Convection Occurrence over the Mediterranean Basin Derived from a Decade of Microwave Satellite Observations. Atmosphere, 2014, 5, 370-398.	2.3	14
74	Vortexâ€“vortex interaction between Hurricane <i>Nadine</i> (2012) and an Atlantic cutâ€off dropping the predictability over the Mediterranean. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 419-432.	2.7	14
75	Deep convective clouds distribution over the Mediterranean region from AMSU-B/MHS observations. Atmospheric Research, 2018, 207, 122-135.	4.1	14
76	Evaluation of a cloud system lifeâ€cycle simulated by the Mesoâ€NH model during FASTEX using METEOSAT radiances and TOVSâ€3I cloud retrievals. Quarterly Journal of the Royal Meteorological Society, 2000, 126, 1735-1750.	2.7	13
77	Seamless MESO-NH modeling over very large grids. Comptes Rendus - Mecanique, 2011, 339, 136-140.	2.1	13
78	Impact of upstream moisture structure on a back-building convective precipitation system in south-eastern France during HyMeX IOP13. Atmospheric Chemistry and Physics, 2018, 18, 16845-16862.	4.9	13
79	Relationship between sea surface temperature, vertical dynamics, and the vertical distribution of atmospheric water vapor inferred from TOVS observations. Journal of Geophysical Research, 1998, 103, 23173-23180.	3.3	12
80	Verification of ensemble forecasts of Mediterranean high-impact weather events against satellite observations. Natural Hazards and Earth System Sciences, 2012, 12, 2449-2462.	3.6	12
81	Meso-scale modelling and radiative transfer simulations of a snowfall event over France at microwaves for passive and active modes and evaluation with satellite observations. Atmospheric Measurement Techniques, 2015, 8, 1605-1616.	3.1	11
82	Precipitation and Mesoscale Convective Systems: Explicit versus Parameterized Convection over Northern Africa. Monthly Weather Review, 2018, 146, 797-812.	1.4	11
83	Gravity waves over the eastern Alps: A synopsis of the 25 October 1999 event (IOP 10) combining <I>in situ</I> and remote-sensing measurements with a high-resolution simulation. Quarterly Journal of the Royal Meteorological Society, 2003, 129, 777-797.	2.7	10
84	Objective evaluation of mesoscale simulations of the Algiers 2001 flash flood by the model-to-satellite approach. Advances in Geosciences, 0, 7, 247-250.	12.0	10
85	Organization of convective ascents in a warm conveyor belt. Weather and Climate Dynamics, 2020, 1, 617-634.	3.5	10
86	Model predicted low-level cloud parameters. Atmospheric Research, 2006, 82, 83-101.	4.1	9
87	Model predicted low-level cloud parameters. Atmospheric Research, 2006, 82, 55-82.	4.1	9
88	Information Content of Millimeter-Wave Observations for Hydrometeor Properties in Mid-Latitudes. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 2287-2299.	6.3	9
89	Observation of polar lows by the Advanced Microwave Sounding Unit: potential and limitations. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 61, 264.	1.7	9
90	The Atmospheric Overturning Induced by Hector the Convector. Journals of the Atmospheric Sciences, 2017, 74, 3271-3284.	1.7	9

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91	Uncertainties in shortâ€term forecasts of a Mediterranean heavy precipitation event: Assessment with satellite observations. Journal of Geophysical Research, 2010, 115, .	3.3	8
92	Precipitation and Mesoscale Convective Systems: Radiative Impact of Dust over Northern Africa. Monthly Weather Review, 2018, 146, 3011-3029.	1.4	8
93	Mid-level convection in a warm conveyor belt accelerates the jet stream. Weather and Climate Dynamics, 2021, 2, 37-53.	3.5	8
94	The radiative impact of desert dust on orographic rain in the CÃ©vennesâ€"Vivarais area: a case study from HyMeX. Atmospheric Chemistry and Physics, 2015, 15, 12231-12249.	4.9	7
95	Potential of microwave observations for the evaluation of rainfall and convection in a regional climate model in the frame of HyMeX and MED-CORDEX. Climate Dynamics, 2018, 51, 837-855.	3.8	7
96	Contrasting stable water isotope signals from convective and large-scale precipitation phases of a heavy precipitation event in southern Italy during HyMeX IOP 13: a modelling perspective. Atmospheric Chemistry and Physics, 2019, 19, 7487-7506.	4.9	7
97	Morning boundary layer conditions for shallow to deep convective cloud evolution during the dry season in the central Amazon. Atmospheric Chemistry and Physics, 2021, 21, 13207-13225.	4.9	6
98	La campagne Cops : genÃ¨se et cycle de vie de la convection en rÃ©gion montagneuse. La MÃ©tÃ©orologie, 2009, 8, 32.	0.5	6
99	CCN sensitivity of a warm precipitation event over fine scale orography with an advanced microphysical scheme. Atmospheric Research, 2001, 59-60, 419-446.	4.1	5
100	Numerical study of tracers transport by a mesoscale convective system over West Africa. Annales Geophysicae, 2011, 29, 731-747.	1.6	5
101	Smoke in the river: an Aerosols, Radiation and Clouds in southern Africa (AEROCLO-sA) case study. Atmospheric Chemistry and Physics, 2022, 22, 5701-5724.	4.9	5
102	Observed variability of North Atlantic oceanic precipitating systems during winter. Journal of Geophysical Research, 2003, 108, .	3.3	4
103	Extensive Comparison Between a Set of European Dust Regional Models and Observations in the Western Mediterranean for the Summer 2012 Pre-ChArMEx/TRAQA Campaign. Springer Proceedings in Complexity, 2016, , 79-83.	0.3	4
104	Acceleration of the southern African easterly jet driven by the radiative effect of biomass burning aerosols and its impact on transport during AEROCLO-sA. Atmospheric Chemistry and Physics, 2022, 22, 8639-8658.	4.9	4
105	Large-scale cloud, precipitation, and upper level features during Fronts and Atlantic Storm Track Experiment as inferred from TIROS-N Operational Vertical Sounder observations. Journal of Geophysical Research, 2001, 106, 17293-17302.	3.3	3
106	Warm Rain in Southern West Africa: A Case Study at SavÃ¨. Atmosphere, 2020, 11, 298.	2.3	3
107	Two case studies of severe storms in the Mediterranean using AMSU. Advances in Geosciences, 0, 12, 19-26.	12.0	3
108	The Three Atmospheric Circulations over the Indian Ocean and the Maritime Continent and Their Modulation by the Passage of the MJO. Journals of the Atmospheric Sciences, 2019, 76, 517-531.	1.7	2

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109	Time-Delayed Tandem Microwave Observations of Tropical Deep Convection: Overview of the C2OMODO Mission. Frontiers in Remote Sensing, 2022, 3, .	3.5	2
110	Mediterranean cloud system variability inferred from satellite observations. Advances in Geosciences, 0, 7, 243-246.	12.0	1
111	Deep Convection as Inferred From the C2OMODO Concept of a Tandem of Microwave Radiometers. Frontiers in Remote Sensing, 2022, 3, .	3.5	1
112	Correction to â€œEvaluation of cloud-resolving model intercomparison simulations using TWP-ICE observations: Precipitation and cloud structureâ€. Journal of Geophysical Research, 2012, 117, n/a-n/a.	3.3	0
113	Observation of polar lows by the Advanced Microwave Sounding Unit: potential and limitations. Tellus, Series A: Dynamic Meteorology and Oceanography, 2009, , .	1.7	0
114	Frontogenesis and the development of secondary wave cyclones in FASTEX. Quarterly Journal of the Royal Meteorological Society, 1999, 125, 925-940.	2.7	0