

# VÃ©ronique Ducrocq

## List of Publications by Year in descending order

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103  
papers

4,108  
citations

147566

31  
h-index

133063

59  
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113  
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113  
docs citations

113  
times ranked

2956  
citing authors

#	ARTICLE	IF	CITATIONS
1	1D+3DVar assimilation of radar reflectivity data: a proof of concept. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 2022, 62, 173.	0.8	90
2	Hydrometeorological evaluation of two nowcasting systems for Mediterranean heavy precipitation events with operational considerations. <i>Hydrology and Earth System Sciences</i> , 2022, 26, 2697-2714.	1.9	4
3	Modelling Mediterranean heavy precipitation events at climate scale: an object-oriented evaluation of the CNRM-AROME convection-permitting regional climate model. <i>Climate Dynamics</i> , 2021, 56, 1717-1752.	1.7	36
4	A network of water vapor Raman lidars for improving heavy precipitation forecasting in southern France: introducing the WaLiNeAs initiative. <i>Bulletin of Atmospheric Science and Technology</i> , 2021, 2, 1.	0.4	5
5	Overview towards improved understanding of the mechanisms leading to heavy precipitation in the western Mediterranean: lessons learned from HyMeX. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 17051-17078.	1.9	12
6	Characterization of the air-sea exchange mechanisms during a Mediterranean heavy precipitation event using realistic sea state modelling. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 1675-1699.	1.9	11
7	Hectometric-scale simulations of a Mediterranean heavy-precipitation event during the Hydrological cycle in the Mediterranean Experiment (HyMeX) first Special Observation Period (SOP1). <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 14649-14667.	1.9	4
8	Assessing the impact of resolution and soil datasets on flash-flood modelling. <i>Hydrology and Earth System Sciences</i> , 2019, 23, 1801-1818.	1.9	15
9	Assimilation of wind data from airborne Doppler cloud-profiling radar in a kilometre-scale NWP system. <i>Natural Hazards and Earth System Sciences</i> , 2019, 19, 821-835.	1.5	2
10	Impact of airborne cloud radar reflectivity data assimilation on kilometre-scale numerical weather prediction analyses and forecasts of heavy precipitation events. <i>Natural Hazards and Earth System Sciences</i> , 2019, 19, 907-926.	1.5	11
11	Le programme HYMEX : connaissances et prÃ©vision des pluies intenses et crues rapides en rÃ©gion mÃ©diterranÃ©enne. <i>Houille Blanche</i> , 2019, 105, 5-12.	0.3	3
12	De l'incertitude dans un systÃ©me de prÃ©vision d'ensemble des crues rapides mÃ©diterranÃ©ennes. <i>Houille Blanche</i> , 2019, 105, 22-30.	0.3	0
13	Multiscale Observations of Deep Convection in the Northwestern Mediterranean Sea During Winter 2012-2013 Using Multiple Platforms. <i>Journal of Geophysical Research: Oceans</i> , 2018, 123, 1745-1776.	1.0	71
14	Ensemble-based flash-flood modelling: Taking into account hydrodynamic parameters and initial soil moisture uncertainties. <i>Journal of Hydrology</i> , 2018, 560, 480-494.	2.3	20
15	Simulation of W-band radar reflectivity for model validation and data assimilation. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2018, 144, 391-403.	1.0	16
16	Role of moisture patterns in the backbuilding formation of HyMeX IOP13 heavy precipitation systems. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2018, 144, 291-303.	1.0	19
17	Impact of upstream moisture structure on a back-building convective precipitation system in south-eastern France during HyMeX IOP13. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 16845-16862.	1.9	13
18	Evaluation of the two-moment scheme LIMA based on microphysical observations from the HyMeX campaign. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2018, 144, 1398-1414.	1.0	15

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19	Assimilation of radar dualâ€polarization observations in the AROME model. Quarterly Journal of the Royal Meteorological Society, 2018, 144, 1352-1368.	1.0	9
20	Impact of the representation of the freshwater river input in the Western Mediterranean Sea. Ocean Modelling, 2018, 131, 115-131.	1.0	4
21	Overview of the Meso-NH model version 5.4 and its applications. Geoscientific Model Development, 2018, 11, 1929-1969.	1.3	194
22	The Challenges of Flash Flood Forecasting. , 2018, , 63-88.		7
23	THORPEX Research and the Science of Prediction. Bulletin of the American Meteorological Society, 2017, 98, 807-830.	1.7	23
24	Initiation and development of a mesoscale convective system in the Ebro River Valley and related heavy precipitation over northeastern Spain during HyMeX IOP 15a. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 942-956.	1.0	19
25	Dense water formation in the northâ€western M editerranean area during HyMeXâ€SOP2 in 1/36â€ ocean simulations: Oceanâ€atmosphere coupling impact. Journal of Geophysical Research: Oceans, 2017, 122, 5749-5773.	1.0	10
26	Fineâ€scale numerical analysis of the sensitivity of the HyMeX IOP16a heavy precipitating event to the turbulent mixingâ€length parametrization. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 3122-3135.	1.0	15
27	Highâ€resolution airâ€sea coupling impact on two heavy precipitation events in the Western Mediterranean. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 2448-2462.	1.0	28
28	Understanding significant precipitation in Madeira island using highâ€resolution numerical simulations of real cases. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 251-264.	1.0	3
29	Lidar observations of low-level wind reversals over the Gulf of Lion and characterization of their impact on the water vapour variability. AIP Conference Proceedings, 2017, , .	0.3	2
30	SURFEX v8.0 interface with OASIS3-MCT to couple atmosphere with hydrology, ocean, waves and sea-ice models, from coastal to global scales. Geoscientific Model Development, 2017, 10, 4207-4227.	1.3	50
31	HyMeX-SOP2: The Field Campaign Dedicated to Dense Water Formation in the Northwestern Mediterranean. , 2016, 29, 196-206.		33
32	Lidar Observations of Low-level Wind Reversals over the Gulf of Lion and Characterization of Their Impact on the Water Vapour Variability. EPJ Web of Conferences, 2016, 119, 15002.	0.1	0
33	Convective initiation and maintenance processes of two backâ€building mesoscale convective systems leading to heavy precipitation events in Southern Italy during <sc>HyMeX IOP</sc> 13. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 2623-2635.	1.0	27
34	Evaluation and application of hydrometeor classification algorithm outputs inferred from multiâ€frequency dualâ€polarimetric radar observations collected during HyMeX. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 95-107.	1.0	16
35	Offshore deep convection initiation and maintenance during the HyMeX IOP 16a heavy precipitation event. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 259-274.	1.0	53
36	Observation of lowâ€level wind reversals in the Gulf of Lion area and their impact on the water vapour variability. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 153-172.	1.0	30

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37	Modeling flash floods in southern France for road management purposes. <i>Journal of Hydrology</i> , 2016, 541, 190-205.	2.3	22
38	A multi-instrument and multi-model assessment of atmospheric moisture variability over the western Mediterranean during HyMeX. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2016, 142, 7-22.	1.0	16
39	Characterization of air-sea exchanges over the Western Mediterranean Sea during HyMeX SOP1 using the AROME-WMED model. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2016, 142, 173-187.	1.0	27
40	Introduction to the <sc>HyMeX S</sc>pecial Issue on "Advances in understanding and forecasting of heavy precipitation in the Mediterranean through the <sc>HyMeX SOP1</sc> field campaign". <i>Quarterly Journal of the Royal Meteorological Society</i> , 2016, 142, 1-6.	1.0	18
41	Dense water formation in the north-western Mediterranean area during HyMeX SOP2 in 1/36° ocean simulations: Sensitivity to initial conditions. <i>Journal of Geophysical Research: Oceans</i> , 2016, 121, 5549-5569.	1.0	17
42	Influence of the sea state on Mediterranean heavy precipitation: a case study from HyMeX SOP1. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2016, 142, 377-389.	1.0	19
43	A seamless weather-climate multi-model intercomparison on the representation of a high impact weather event in the western Mediterranean: <sc>HyMeX IOP12</sc>. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2016, 142, 433-452.	1.0	24
44	Comparisons between S-, C- and X-band polarimetric radar observations and convective-scale simulations of the HyMeX first special observing period. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2016, 142, 347-362.	1.0	24
45	Numerical simulations of significant orographic precipitation in Madeira island. <i>Atmospheric Research</i> , 2016, 169, 102-112.	1.8	12
46	Hydrometeorological multi-model ensemble simulations of the 4 November 2011 flash flood event in Genoa, Italy, in the framework of the DRIHM project. <i>Natural Hazards and Earth System Sciences</i> , 2015, 15, 537-555.	1.5	47
47	An overview of the lightning and atmospheric electricity observations collected in southern France during the HYdrological cycle in Mediterranean EXperiment (HyMeX), Special Observation Period 1. <i>Atmospheric Measurement Techniques</i> , 2015, 8, 649-669.	1.2	35
48	Multifrequency Radar Observations Collected in Southern France during HyMeX-SOP1. <i>Bulletin of the American Meteorological Society</i> , 2015, 96, 267-282.	1.7	22
49	A GPS network for tropospheric tomography in the framework of the Mediterranean hydrometeorological observatory C@vennes-Vivarais (southeastern France). <i>Atmospheric Measurement Techniques</i> , 2014, 7, 553-578.	1.2	41
50	HyMeX: A 10-Year Multidisciplinary Program on the Mediterranean Water Cycle. <i>Bulletin of the American Meteorological Society</i> , 2014, 95, 1063-1082.	1.7	288
51	HyMeX-SOP1: The Field Campaign Dedicated to Heavy Precipitation and Flash Flooding in the Northwestern Mediterranean. <i>Bulletin of the American Meteorological Society</i> , 2014, 95, 1083-1100.	1.7	262
52	Ocean Mixed Layer responses to intense meteorological events during HyMeX-SOP1 from a high-resolution ocean simulation. <i>Ocean Modelling</i> , 2014, 84, 84-103.	1.0	25
53	An ensemble study of HyMeX IOP6 and IOP7a: sensitivity to physical and initial and boundary condition uncertainties. <i>Natural Hazards and Earth System Sciences</i> , 2014, 14, 1071-1084.	1.5	23
54	Assessment of the water supply to Mediterranean heavy precipitation: a method based on finely designed water budgets. <i>Atmospheric Science Letters</i> , 2013, 14, 133-138.	0.8	38

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55	Preface: Forecast and projection in climate scenario of Mediterranean intense events: uncertainties and propagation on environment (the MEDUP project). <i>Natural Hazards and Earth System Sciences</i> , 2013, 13, 3043-3047.	1.5	1
56	A Climatology of the Mesoscale Environment Associated with Heavily Precipitating Events over a Northwestern Mediterranean Area. <i>Journal of Applied Meteorology and Climatology</i> , 2012, 51, 468-488.	0.6	122
57	Hydro-meteorological evaluation of a convection-permitting ensemble prediction system for Mediterranean heavy precipitating events. <i>Natural Hazards and Earth System Sciences</i> , 2012, 12, 2631-2645.	1.5	38
58	Idealized numerical simulations of quasi-stationary convective systems over the Northwestern Mediterranean complex terrain. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2012, 138, 1751-1763.	1.0	49
59	Potential of shipborne GPS atmospheric delay data for prediction of Mediterranean intense weather events. <i>Atmospheric Science Letters</i> , 2012, 13, 250-256.	0.8	17
60	Uncertainty of lateral boundary conditions in a convection-permitting ensemble: a strategy of selection for Mediterranean heavy precipitation events. <i>Natural Hazards and Earth System Sciences</i> , 2012, 12, 2993-3011.	1.5	29
61	Initiation of a severe thunderstorm over the Mediterranean Sea. <i>Atmospheric Research</i> , 2011, 100, 603-620.	1.8	43
62	Cloud-Resolving Ensemble Simulations of Mediterranean Heavy Precipitating Events: Uncertainty on Initial Conditions and Lateral Boundary Conditions. <i>Monthly Weather Review</i> , 2011, 139, 403-423.	0.5	106
63	Perturbation of convection-permitting NWP forecasts for flash-flood ensemble forecasting. <i>Natural Hazards and Earth System Sciences</i> , 2011, 11, 1529-1544.	1.5	68
64	Origin of the moisture feeding the Heavy Precipitating Systems over Southeastern France. <i>Natural Hazards and Earth System Sciences</i> , 2011, 11, 1163-1178.	1.5	92
65	Statistical-dynamical downscaling for Mediterranean heavy precipitation. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2011, 137, 736-748.	1.0	26
66	A statistical downscaling to identify the large-scale circulation patterns associated with heavy precipitation events over southern France. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2011, 137, 1812-1827.	1.0	100
67	Benefit of coupling the ISBA land surface model with a TOPMODEL hydrological model version dedicated to Mediterranean flash-floods. <i>Journal of Hydrology</i> , 2010, 394, 256-266.	2.3	53
68	Coupling the ISBA Land Surface Model and the TOPMODEL Hydrological Model for Mediterranean Flash-Flood Forecasting: Description, Calibration, and Validation. <i>Journal of Hydrometeorology</i> , 2010, 11, 315-333.	0.7	42
69	Simulation of satellite infrared radiances for convective-scale data assimilation over the Mediterranean. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	5
70	Hydrometeorological modelling for flash flood areas: the case of the 2002 Gard event in France. <i>Journal of Flood Risk Management</i> , 2009, 2, 101-110.	1.6	13
71	Effects of the air-sea coupling time frequency on the ocean response during Mediterranean intense events. <i>Ocean Dynamics</i> , 2009, 59, 539-549.	0.9	12
72	Flash flood forecasting within the PREVIEW project: value of high-resolution hydrometeorological coupled forecast. <i>Meteorology and Atmospheric Physics</i> , 2009, 103, 115-125.	0.9	16

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73	Description of convective-scale numerical weather simulation use in a flight simulator within the Flysafe project. <i>Meteorology and Atmospheric Physics</i> , 2009, 103, 127-136.	0.9	5
74	Idealized mesoscale numerical study of Mediterranean heavy precipitating convective systems. <i>Meteorology and Atmospheric Physics</i> , 2009, 103, 45-55.	0.9	24
75	Two-way one-dimensional high-resolution air-sea coupled modelling applied to Mediterranean heavy rain events. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2009, 135, 187-204.	1.0	27
76	The benefit of GPS zenith delay assimilation to high-resolution quantitative precipitation forecasts: a case study from COPS IOP 9. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2009, 135, 1788-1800.	1.0	38
77	Impact of GPS zenith delay assimilation on convective-scale prediction of Mediterranean heavy rainfall. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	45
78	A numerical study of three catastrophic precipitating events over southern France. II: Mesoscale triggering and stationarity factors. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2008, 134, 131-145.	1.0	168
79	A numerical study of three catastrophic precipitating events over southern France. I: Numerical framework and synoptic ingredients. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2008, 134, 111-130.	1.0	178
80	Sensitivity of three Mediterranean heavy rain events to two different sea surface fluxes parameterizations in high-resolution numerical modeling. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	21
81	What Should Be Considered When Simulating Doppler Velocities Measured by Ground-Based Weather Radars?. <i>Journal of Applied Meteorology and Climatology</i> , 2008, 47, 2256-2262.	0.6	8
82	La Méditerranée, région témoin de Cyprim à Hymex. <i>Houille Blanche</i> , 2007, 93, 90-96.	0.3	1
83	GPS zenith delay sensitivity evaluated from high-resolution numerical weather prediction simulations of the 8-9 September 2002 flash flood over southeastern France. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	64
84	Sensitivity of torrential rain events to the sea surface temperature based on high-resolution numerical forecasts. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	104
85	Point and areal validation of forecast precipitation fields. <i>Meteorological Applications</i> , 2006, 13, 1.	0.9	29
86	Hydrological evaluation of high-resolution precipitation forecasts of the Gard flash-flood event (8-9 September 2002). <i>Quarterly Journal of the Royal Meteorological Society</i> , 2006, 132, 1091-1117.	1.0	42
87	A Radar Simulator for High-Resolution Nonhydrostatic Models. <i>Journal of Atmospheric and Oceanic Technology</i> , 2006, 23, 1049-1067.	0.5	44
88	Mesoscale analysis and impact on simulation of IOP14 of the MAP experiment. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2005, 131, 2769-2793.	1.0	4
89	The Catastrophic Flash-Flood Event of 8-9 September 2002 in the Gard Region, France: A First Case Study for the Cévennes-Vivarais Mediterranean Hydrometeorological Observatory. <i>Journal of Hydrometeorology</i> , 2005, 6, 34-52.	0.7	333
90	Prévisions hydrologiques et échelles spatiales : l'exemple des modèles opérationnels de Méditerranée-France. <i>Comptes Rendus - Geoscience</i> , 2005, 337, 181-192.	0.4	9

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91	Le projet AROME. Houille Blanche, 2005, 91, 39-43.	0.3	15
92	Assimilation of Radar Data in Numerical Weather Prediction (NWP) Models. Physics of Earth and Space Environments, 2004, , 255-279.	0.5	9
93	L'écoulement des 8-9 septembre 2002: situation météorologique et simulation à meso-échelle. Houille Blanche, 2004, 90, 86-92.	0.3	11
94	A Numerical Study of a Nontornadic Supercell over France. Monthly Weather Review, 2003, 131, 2290-2311.	0.5	4
95	Storm-Scale Numerical Rainfall Prediction for Five Precipitating Events over France: On the Importance of the Initial Humidity Field. Weather and Forecasting, 2002, 17, 1236-1256.	0.5	146
96	Simulation à haute résolution des épisodes convectifs et impacts hydrologiques sur la région Cévennes - Vivarais. Houille Blanche, 2002, 88, 40-45.	0.3	0
97	Initialization of a fine-scale model for convective-system prediction: A case study. Quarterly Journal of the Royal Meteorological Society, 2000, 126, 3041-3065.	1.0	42
98	Mesoscale analyses and diagnostic parameters for deep convection nowcasting. Meteorological Applications, 2000, 7, 145-161.	0.9	18
99	Initialization of a fine-scale model for convective-system prediction: A case study. Quarterly Journal of the Royal Meteorological Society, 2000, 126, 3041-3065.	1.0	2
100	Parallelization of the French Meteorological Mesoscale Model MesoNH. Lecture Notes in Computer Science, 1999, , 1417-1422.	1.0	6
101	Diagnostic tools using a mesoscale NWP model for the early warning of convection. Meteorological Applications, 1998, 5, 329-349.	0.9	15
102	Simulation of an Observed Squall Line with a Meso-Beta-Scale Hydrostatic Model. Weather and Forecasting, 1995, 10, 380-399.	0.5	17
103	Adiabatic and Viscous Simulations of Symmetric Instability: Structure, Evolution, and Energetics. Journals of the Atmospheric Sciences, 1993, 50, 23-42.	0.6	7