Olivier Caumont

List of Publications by Year
in descending order

35 papers	948 citations	623734 14 h-index	501196 28 g-index
62 all docs	62 docs citations	62 times ranked	1099 citing authors

#	Article	IF	Citations
1	Overview of the Meso-NH model version 5.4 and its applications. Geoscientific Model Development, 2018, 11, 1929-1969.	3.6	194
2	Operational Implementation of the 1D+3D-Var Assimilation Method of Radar Reflectivity Data in the AROME Model. Monthly Weather Review, 2014, 142, 1852-1873.	1.4	104
3	1D+3DVar assimilation of radar reflectivity data: a proof of concept. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 62, 173.	1.7	90
4	GPS zenith delay sensitivity evaluated from high-resolution numerical weather prediction simulations of the 8â€“9 September 2002 flash flood over southeastern France. Journal of Geophysical Research, 2006, 111, .	3.3	64
5	Hydrometeorological multi-model ensemble simulations of the 4 November 2011 flash flood event in Genoa, Italy, in the framework of the DRIHM project. Natural Hazards and Earth System Sciences, 2015, 15, 537-555.	3.6	47
6	A Radar Simulator for High-Resolution Nonhydrostatic Models. Journal of Atmospheric and Oceanic Technology, 2006, 23, 1049-1067.	1.3	44
7	Assimilation of humidity and temperature observations retrieved from groundâ€based microwave radiometers into a convectiveâ€scale NWP model. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 2692-2704.	2.7	40
8	The impact of lightning and radar reflectivity factor data assimilation on the very short-term rainfall forecasts of RAMS@ISAC: application to two case studies in Italy. Natural Hazards and Earth System Sciences, 2019, 19, 1839-1864.	3.6	30
9	Quantitative precipitation estimation based on high-resolution numerical weather prediction and data assimilation with WRF â€“ a performance test. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 67, 25047.	1.7	27
10	Contribution of personal weather stations to the observation of deep-convection features near the ground. Natural Hazards and Earth System Sciences, 2020, 20, 299-322.	3.6	26
11	Comparisons between Sâ€, Câ€and Xâ€band polarimetric radar observations and convectiveâ€scale simulations of the HyMeX first special observing period. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 347-362.	2.7	24
12	Multifrequency Radar Observations Collected in Southern France during HyMeX-SOP1. Bulletin of the American Meteorological Society, 2015, 96, 267-282.	3.3	22
13	Long-term observations minus background monitoring of ground-based brightness temperatures from a microwave radiometer network. Atmospheric Measurement Techniques, 2017, 10, 3947-3961.	3.1	19
14	Setting Up an Hydro-Meteo Experiment in Minutes: The DRIHM e-Infrastructure for HM Research. , 2014, , .		16
15	Simulation ofÂ Wâ€band radar reflectivity for model validation and data assimilation. Quarterly Journal of the Royal Meteorological Society, 2018, 144, 391-403.	2.7	16
16	Concurrent satellite and ground-based lightning observations from the Optical Lightning Imaging Sensor (ISS-LIS), the low-frequency network Meteorage and the SAETTA Lightning Mapping Array (LMA) in the northwestern Mediterranean region. Atmospheric Measurement Techniques, 2020, 13, 853-875.	3.1	16
17	The heavy precipitation event of 14â€“15 October 2018 in the Aude catchment: a meteorological study based on operational numerical weather prediction systems and standard and personal observations. Natural Hazards and Earth System Sciences, 2021, 21, 1135-1157.	3.6	15
18	Errors Caused by Long-Term Drifts of Magnetron Frequencies for Refractivity Measurement with a Radar: Theoretical Formulation and Initial Validation. Journal of Atmospheric and Oceanic Technology, 2012, 29, 1428-1434.	1.3	13

#	Article	IF	Citations
19	DRIHM(2US): An e-Science Environment for Hydrometeorological Research on High-Impact Weather Events. Bulletin of the American Meteorological Society, 2017, 98, 2149-2166.	3.3	13
20	Links Between Weather Phenomena and Characteristics of Refractivity Measured by Precipitation Radar. Boundary-Layer Meteorology, 2012, 143, 77-95.	2.3	12
21	The AROME-WMED reanalyses of the first special observation period of the Hydrological cycle in the Mediterranean experiment (HyMeX). Geoscientific Model Development, 2019, 12, 2657-2678.	3.6	12
22	Impact of airborne cloud radar reflectivity data assimilation on kilometre-scale numerical weather prediction analyses and forecasts of heavy precipitation events. Natural Hazards and Earth System Sciences, 2019, 19, 907-926.	3.6	11
23	Assimilation of radar dualâ€polarization observations in the AROME model. Quarterly Journal of the Royal Meteorological Society, 2018, 144, 1352-1368.	2.7	9
24	Dealiasing Doppler Velocities Measured by a Bistatic Radar Network during a Downburst-Producing Thunderstorm. Journal of Atmospheric and Oceanic Technology, 2004, 21, 717-729.	1.3	8
25	What Should Be Considered When Simulating Doppler Velocities Measured by Ground-Based Weather Radars?. Journal of Applied Meteorology and Climatology, 2008, 47, 2256-2262.	1.5	8
26	Data assimilation impact studies with the AROME-WMED reanalysis of the first special observation period of the Hydrological cycle in the Mediterranean Experiment. Natural Hazards and Earth System Sciences, 2021, 21, 463-480.	3.6	7
27	An Observation Operator for Radar Refractivity Change: Comparison of Observations and Convective-Scale Simulations. Boundary-Layer Meteorology, 2013, 148, 379-397.	2.3	6
28	Comparison of realâ€time refractivity measurements by radar with automatic weather stations, AROMEâ€WMED and WRF forecast simulations during SOP1 of the HyMeX campaign. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 138-152.	2.7	6
29	Combined use of volume radar observations and high-resolution numerical weather predictions to estimate precipitation at the ground: methodology and proof of concept. Atmospheric Measurement Techniques, 2019, 12, 5669-5684.	3.1	6
30	W-band radar observations for fog forecast improvement: an analysis of model and forward operator errors. Atmospheric Measurement Techniques, 2021, 14, 4929-4946.	3.1	6
31	Description of convective-scale numerical weather simulation use in a flight simulator within the Flysafe project. Meteorology and Atmospheric Physics, 2009, 103, 127-136.	2.0	5
32	A data assimilation experiment of temperature and humidity profiles from an international network of ground-based microwave radiometers. , 2014, , .		5
33	A network of water vapor Raman lidars for improving heavy precipitation forecasting in southern France: introducing the WaLiNeAs initiative. Bulletin of Atmospheric Science and Technology, 2021, 2, 1.	0.9	5
34	A numerical study to investigate the roles of former Hurricane Leslie, orography and evaporative cooling in the 2018Â Aude heavy-precipitation event. Weather and Climate Dynamics, 2021, 2, 795-818.	3.5	4
35	Assimilation of wind data from airborne Doppler cloud-profiling radar in a kilometre-scale NWP system. Natural Hazards and Earth System Sciences, 2019, 19, 821-835.	3.6	2