

Curriculum Vitae

Meryl WIMMER



Post-Doc in atmospheric modeling

PUBLICATIONS

	Total	1 st autor
Peer-reviewed journals	3	2
Other journals	1	-
Proceedings	1	-

PRESENTATIONS / POSTERS

	Total	1 st autor
Congress, conference, symposium, colloquium	4/1	3/-
International workshop, meetings, ...	12/3	6/-
French workshop, meetings, ...	12/3	6/3

EDUCATION

10/2018 – 12/2021	PhD thesis « <i>Model error representation in the regional Ensemble Prediction System AROME-EPS</i> » (defended on 07/12/2021) Centre National de Recherches Météorologiques, Doctoral School SDU2E Université Toulouse III - Paul Sabatier, Toulouse (FR)
4 - 8/03/2019	ECMWF Training Course: Parametrization of subgrid physical processes, European Centre for Medium-Range Weather Forecasts, Reading (UK)
2016-2018	MSc “Sciences of the Ocean, Atmosphere, and Climate”, Climate Dynamics studies (Magna Cum Laude, Rank 1/12) Université Toulouse III - Paul Sabatier, Toulouse (FR)
2014-2016	BSc “Physics - Chemistry, Applied to Astrophysics and Meteorology”, (with high honours) Université Toulouse III - Paul Sabatier, Tarbes (FR)

PROFESSIONAL EXPERIENCE

Since 02/2022	Post-Doctoral contrat: « <i>Impact of cloud microphysical schemes of global and regional models on the dynamics of Arctic cyclones: comparison with airborne and CloudSat-CALIPSO data</i> », Laboratoire de Météorologie Dynamique, Paris (FR) <i>DARDAR product, liquid-ice partition function, ARPEGE, LMDZ, THINICE, student supervision</i> Funding: CNES post-doctoral grant Supervisors: Gwendal RIVIÈRE, Julien DELANOË, Éric BAZILE, Adrien DESCHAMPS
2019-2021 (2 years)	French teaching of Algorithmic and Python: 36h lessons (x2=72h) for the Techniciens des Métiers de la Météorologie (military and civils students), Ecole Nationale de la Météorologie, Toulouse (FR) <i>Course design, TD and exams, Exam marking</i>
10/2018 – 12/2021 (3 years and 3 months)	PhD thesis: « <i>Model error representation in the regional Ensemble Prediction System AROME-EPS</i> », Centre National de Recherches Météorologiques, Doctoral School SDU2E, Toulouse (FR) <i>Sensitivity Analysis, Stochastic parameters perturbation, Metamodelling, Ensemble Prediction System, AROME-EPS</i> Funding : Université Toulouse III - Paul Sabatier (Unique contract) Thesis directors : Loïk BERRE, Laurent DESCAMPS Publication : Wimmer et al. (2022 ; <i>QJRM.S.</i> ; doi : 10.1002/qj.4239)
02/2018 – 08/2018 (6 months)	2nd Master internship: « <i>First analysis of the NAWDEX field campaign</i> », Centre National de Recherches Météorologiques, Toulouse (FR) <i>Deep Convection parameterization, Lagrangian trajectories, ARPEGE-EPS, NAWDEX</i> Supervisors: Philippe ARBOGAST, Gwendal RIVIÈRE Publication : Rivière et al. (2021 ; <i>WCD</i> ; doi : 10.5194/wcd-2-1011-2021) Wimmer et al. (2022 ; <i>WCD</i> ; doi : 10.5194/wcd-3-863-2022)
04/2017 – 06/2017 (2 months)	1st Master internship: « <i>Study of extreme meteorological events on Corsica</i> » Laboratoire d’Aérodynamique, Toulouse (FR) <i>Méso-NH, High Precipitation Event, Diaprog,</i> Supervisors: Dominique LAMBERT, Evelyne RICHARD

RESEARCH THEMES

Atmospheric modeling	AROME, ARPEGE, Méso-NH, LMDZ, AROME-EPS, ARPEGE-EPS
Physical Parameterization	Deep convection, large-scale subgrid condensation, ...
Dynamics of mid and high latitudes	Extratropical Cyclone, Warm Conveyor Belt, Jet Stream, Lagrangian Trajectories, Arctic Cyclone, ...
Model Uncertainty	Parameters perturbation, Multi-physics, SPPT, ...
Sensitivity Analysis	Morris method, Sobol’ indices, metamodelling, Gaussian Processes, Polynomial Chaos Expansion
Observations	Aircraft data : NAWDEX, THINICE ; Satellite data : CloudSat - CALIPSO

SKILLS

Language	French: Native language English: European B2 level, host family stays in the UK and Ireland, travels Italian: European B1 level, Italian-language European section, language exchange with Milan
Information Technology	Office automation: Pack Office, Libre Office, Open Office, LaTeX Operating System: Linux (Ubuntu, OpenSuse, Mageia), Windows Programming: Python, Matlab, R, Fortran90, Bash, HTML5, CSS3, PHP, Ferret