

Susanna Hagelin, PhD

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Professional Experience

Nov 2013 - today	UK Ensemble Forecasting Scientist Met Office, Exeter, United Kingdom My job is to evaluate and develop the Met Office regional ensemble system MOGREPS-UK. I test model upgrades and prepare them for operational implementation. My current research focus is to investigate the impact of running the UK ensemble with a higher resolution and the impact of running the model with a larger domain.
June 2011 - Nov 2013	Post Doc Météo-France/CNRM, Toulouse, France I was running the operational AROME weather forecast model in a high resolution (500 m) over an area centred on Paris-CDG airport. My main duties are the validation of AROME simulations with respect to observations of wind speed, temperature, etc., and to find the optimal configuration of the model and the data assimilation system for a nowcasting configuration which will be a part of the future AROME airport, developed in the framework of the SESAR project. Since June 2013 I also work on the development and verification of the ensemble-AROME NWC (Nowcasting) covering all of mainland France.
April 2010 - Dec 2010	PhD Student Dept. of Earth Sciences, Uppsala University, Uppsala Sweden The final period of my PhD was spent at Uppsala University to complete the thesis. For details please see previous position.
Nov 2006 - March 2010	PhD Student INAF - Osservatorio Astrofisico di Arcetri, Florence, Italy My PhD thesis was part of the ForOT-project, supported by a Marie Curie Excellence Grant, which aimed to characterise the optical turbulence. My main objective was to simulate the optical turbulence at Mt Graham using the mesoscale model Meso-NH and analysed the output against measurements from a vertical profiler. I participated in two of our measurement campaigns at Mt Graham as well as several international conferences where I presented my work.
Summers 2004-2006	Office Assistant Riksbyggen, Göteborg, Sweden

	I was assisting in the sale of newly produced appartements and various other administrative tasks. The primary task was to assist the prospective costumers and provide them with the relevant information.
Spring 2005 and 2004	Supplemental Instruction Teacher Dept. of Physics, Uppsala University, Uppsala, Sweden I was giving extra lessons to younger students as a complement to the regular tuition. The main objective of these lessons was to try to make the students think for themselves and cooperate in order to find the answers to various problems.

Education

2006-2010	PhD in Meteorology, Uppsala University, Sweden.
Thesis title	Optical Turbulence Characterization for Ground-Based Astronomy
2002-2006	MSc in Physics, Uppsala University, Sweden.
Thesis title	Effects of Upwelling Events on the Atmosphere

Languages

Swedish	Mother tongue
English	Fluent
Italian	Fluent
French	Fluent

Publications

2015	AROME-NWC : a new nowcasting tool based on an operational meso-scale forecasting system , L. Auger, O. Dupont, S. Hagelin, P. Brousseau and P. Brovelli, QJRMS, vol 141, issue 690, pp. 1603-1611
2013	Nowcasting with the AROME model : First results from the high-resolution AROME Airport , S. Hagelin, L. Auger, P. Brovelli and O. Dupont, Weather and Forecasting, vol 29, issue 4, pp 773-787
2011	Optical Turbulence simulations at Mt Graham using the Meso-NH model , S. Hagelin, E. Masciadri and F. Lascaux, MNRAS, vol 412, issue 4, pp.2695-2706 Mesoscale optical turbulence simulations above Dome C, Dome A and South Pole , F. Lascaux, E. Masciadri and S. Hagelin, MNRAS, vol 411, issue 1, pp. 693-704
2010	Wind speed vertical distribution at Mt Graham , S. Hagelin, E. Masciadri and F. Lascaux, MNRAS, vol. 407, issue 4, pp 2230-2240 Optical Turbulence vertical distribution with standard and high resolution at Mt Graham , E. Masciadri, J. Stoesz, S. Hagelin and F. Lascaux, MNRAS, vol. 404, issue 1, pp 144-158 Mesoscale optical turbulence simulations at Dome C : refinements , F. Lascaux, E. Masciadri and S. Hagelin, MNRAS, vol. 403, issue 4, pp. 1714-1718
2009	Mesoscale optical turbulence simulations at Dome C , F. Lascaux, E. Masciadri, S. Hagelin and J. Stoesz, MNRAS, vol. 398, issue 3, pp. 1093-1104
2008	Comparison of the atmosphere above the South Pole, Dome C and Dome A : first attempt , S. Hagelin, E. Masciadri, F. Lascaux and J. Stoesz, MNRAS, vol. 387, issue 4, pp. 1499-1510