

**Report on the 35th International Conference on Alpine Meteorology
Riva del Garda (TN) Italy 2nd-6th September 2019**

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The 35th ICAM conference take place in Italy (Riva del Garda), twenty years after Torino in 1998 (25th conference).

The talks were grouped into six thematic sessions: Atmosphere Dynamics, Precipitation, Planetary Boundary Layer, Weather forecasting, Applications and Climate. Moreover, on Tuesday afternoon a special symposium was organised to celebrate the 70th Richard Rotunno birthday, and so an excursion into Rotunno’s career, discovers and main works was done, and gave to young scientist like me an inspiration benchmark. The poster sessions were six, and underlined the main topics of the oral sessions: Dynamics and orographically forced airflow, Orographic precipitation and convective storms, Boundary–layer processes, Numerical weather prediction and weather forecasting (on which my poster is presented), Applications of mountain meteorology and Mountain climate.

A short overview of the most interesting talks is needed. Gravitational waves and orographically forced winds (and instabilities) takes a great part of the first two days. Many authors presented numerical simulations of flow (also downslope winds) around idealized mountains, or study events (or simulations) of orographic precipitation and local convection (with convective precipitations). It was a theoretical and “idealised” session, useful to understand the overall processes acting near the mountain ranges. Some experimental works were presented about Bora, Chinoux or Föhn. The PBL sessions were dominated by in situ experiments, and some very intense observation experiments (such as in the Pyrenees or in Germany) with a high concentration of new instrumentation. It was also presented a recap of the first TEAMx workshop of the week before, where all the interested parts discussed on the objectives and strategies of this new challenging project. Thursday the conference was dedicated to the numerical modelling for weather prediction, different approaches were presented, and some interesting parameterisation was discussed relatively to the complex mountainous terrain, where NWP make some difficulties to produce reliable forecasts. Some case studies were presented, one among the others is the Vaia storm that hits the Northern Italy between October and November 2018. The conference turned on some applications of mountain meteorology: from pollutant dispersion to hydrological purposes, and also some studies on alpine cities of wind farm energy production. The last topic was the mountain climate, its variability and some climate model applications.

My personal contribution at this conference was entitled: “High resolution WRF over mountainous complex terrain: a case-study over the Ortles Cevedale area (Central Italian Alps)”. That presents an implementation of WRF at 0.5 km of grid-spacing and its test with four weather stations and a micrometeorological station, to assess how good is the representation of a particular complex terrain valley, the Forni Glacier Valley (SO, Italy). During my PhD I dealt with the interaction between the atmosphere (at different time scales, climate and meteorology) and the land-surface in changing environments such as the high-mountain glacier forelands. For this purpose, I managed two experimental campaigns and I set-up the presented WRF.

The ICAM conference permit me to meet many scientists who work on the same topics. During the oral sessions I was able to upgrade my knowledge, while during the poster sessions I was able to directly discuss with eminent colleagues.

I am very thankful to the EMS Scientific Committee that appreciate my research, and select me for the YSTA and also to the SMI for supporting my candidacy for this award. It was a very intense and important moment for my career.