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Report on the “30th International Conference on Alpine Meteorology” (ICAM2009) in Rastatt, Germany, 11-15 May 2009

This conference has covered all the main important hot topics in current Alpine meteorology research. Both the participants and organisers have promoted the active participation of attendants during the oral sessions and the poster sessions, bringing up interesting and fruitful discussions between experienced researchers and junior ones.

Within the existing topics, three have been of special interest in my current and future research: boundary layer processes, dynamics and numerical weather prediction. Boundary layer section has included contributions with detailed studies on the thermally driven flows and cold pools, mainly using numerical modelling tools. This is closely related to part of my current research, which focuses on high resolution modelling in alpine valleys giving special importance to conditions leading to poor air quality levels, being therefore essential to know how and which typical flows could lead to such conditions and how the models are able to reproduce them. Dynamics section has provided, for the same reason, valuable information about mesoscale mountain flows. The numerical weather prediction section, has given an overview of the current problems in numerical modelling, also when having to give the information to the final users or decision makers, as well as where numerical weather prediction points towards.

The remaining areas of the conference have also been of great utility since they have provided me with a better understanding of other problems and important issues when dealing with the influence of mountainous areas in the local meteorology. Specially the snow section, which is strongly related to initialisation problems appearing often in the meteorological modelling of alpine areas with a poor definition of the snow cover coming from the global meteorological fields. The precipitation section has also given an interesting insight into the very latest results out from the COPS experiment, and the better knowledge of the processes involved in convective and orographically-induced precipitation. Additionally, this section has often included numerical modelling studies using different models (COSMO, WRF, MESO-NH) which is of particular interest to me due to my modelling background and current research, with applications and improvements of the modelling tools and procedures in complex topographical areas.

I would therefore encourage young scientists in the field of mountain meteorology to participate in future ICAMs and enjoy their highly motivating, educating, scientifically challenging and also friendly atmosphere.

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