Séminaire 28 Mai 2011 9h45min / Seminar May 28th 2011 9h45min

Conférencier/Lecturer: Andy Brown (UK Metoffice)

Sujet/Subject: Observations and modelling of cold-air pooling in valleys

Présentation/Presentation: Anglais / English

Lieu/Room: Salle des vents (Dorval)

Abstract

Relatively small-scale hills and valleys can have a large impact on local weather (e.g. temperature, fog) which may be very relevant for a number of users of forecasts. However, they also present a major prediction challenge, as many of the relevant processes are still poorly understood (e.g. the relative importance of in-situ sheltering and of drainage currents in the formation of cold pools). The scales are also such that the processes are unresolved in most current NWP models and so post-processing techniques are typically required in operational forecast systems. This presentation will review recent work carried out to better understand the formation of cold-air pools, and to improve our ability to predict them. This includes a major recent field campaign (COLPEX) and research use of the Met Office Unified Model at 100m resolution.