Geophysical Research Abstracts, Vol. 7, 06110, 2005 SRef-ID: 1607-7962/gra/EGU05-A-06110 © European Geosciences Union 2005



Uncertainty in radar simulator measurements on simplified meteorological scenarios

L. Molini, A. Parodi and F. Siccardi CIMA, University of Genoa, Italy

A three-dimensional radar simulator model (RSM) developed by Gunther Haase (2000) is coupled with a nonhydrostatic mesoscale weather forecast model Lokal Model. The radar simulator is able to model reflectivity measurements using as input some meteorological fields (e.g. temperature, pressure, cloud water content etc) generated by Lokal Model. Some of uncertainty sources associated to radar measurements are considered: the mutual position of the radar and the meteorological structure to observe, the number of observed microphysical species and the choice of drop size distribution (DSD) parameters. Preliminary RSM results for simplified meteorological scenarios (e.g.:a humid updraft on a flat surface, supercells etc) are presented.