



Air quality modelling over the Italian territory

G. Curci (1), M. Rinaldi (1), P. Stocchi (1), L. Bernardini (1) and G. Visconti

(1) University of L'Aquila - Center of Excellence for integration of remote sensing and numerical techniques to forecast severe weather, L'Aquila, Italy (contact Email: gabriele.curci@aquila.infn.it)

We show results of the implementation of the MM5-CHIMERE regional model over the Italian territory. The model is run on a coarse grid over the European continent at an horizontal resolution of 36 km and results are used as boundary conditions for nested runs up to 3 km of resolution over the Po Valley and central Italy. Emission inventory for the high resolution model is improved for the specific use over the interested areas. First results on the levels of gas pollutants over Italy from the model in comparison with station measurements are reported. The model reproduce reasonably well the general features of the seasonal and diurnal cycle of gases such as ozone, but need further implementation for a reliable use for day-to-day forecast of pollution episodes.