



## **Three models intercomparison for quantitative precipitation forecast over Calabria**

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In the framework of the National Project "Sviluppo di distretti industriali per le Osservazioni della Terra" (Development of Industrial Districts for Earth Observations) funded by MIUR (Ministero dell'Università e della Ricerca Scientifica - Italian Ministry of the University and Scientific Research) two operational mesoscale models were set-up for Calabria, the southernmost tip of the Italian peninsula.

Models are RAMS (Regional Atmospheric Modeling System) and MM5 (Mesoscale Modeling 5) that are run every day at Crati srl to produce weather forecast over Calabria (<http://www.crati.it>).

This paper reports model intercomparison for Quantitative Precipitation Forecast evaluated for a 20 month period from 1<sup>th</sup> October 2000 to 31<sup>th</sup> May 2002. In addition to RAMS and MM5 outputs, QBOLAM rainfall fields are available for the period selected and included in the comparison. This model runs operationally at "Agenzia per la Protezione dell' Ambiente e per i Servizi Tecnici".

Forecasts are verified comparing models outputs with raingauge data recorded by the regional meteorological network, which has 75 raingauges.

Large scale forcing is the same for all models considered and differences are due to physical/numerical parameterizations and horizontal resolutions. QPFs show differ-

ences between models. Largest differences are for BIA compared to the other considered scores. Performances decrease with increasing forecast time for RAMS and MM5, whilst QBOLAM scores better for second day forecast.