



COSMO GM, Sibiu, 2-6 September 2013

Priority Task - NWP Meteorological Test Suite Plan

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Goal

- Build up a software environment to perform carefully-controlled and rigorous testing
 - \supset calculation of verification statistics for any COSMO model test - version
- Offer necessary information on the model forecasting performance
- Provide the COSMO community with standards against which the impacts of new developments in the model should be evaluated
- Benchmark to monitor the progress of mesoscale forecast improvement (periodic testing as COSMO evolves)

Basic information

- Duration: 09/2013 - 09/2014 \simeq 0.8 FTE
- In the frame of WG5
- ECMWF computer resources
- Participating scientists
 - Adriano RASPANTI (USAM)
 - Amalia IRIZA (NMA)
 - Andrea MONTANI (ARPA-SIMC)
 - Bogdan MACO (NMA)
 - Dimitra BOUCOUVALA (HNMS)
 - Flora GOFA (HNMS)
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ECMWF Resources

Special Project submitted and accepted by the ECMWF
(ready to use) - Adriano RASPANTI (USAM)

- 400000 SBU
- use of the new linux cluster ECGATE
- access to ECGATE done through the ECMWF card
- member states: OK
- non-member states: request addressed through the Computer Representative of a member state - to be investigated

Setting-up a public IP address for VERSUS - to be explored



- VERSUS system on ECGATE will be accessed from a local desktop through internet connection
- different kind of users can access the system to perform verification or check available plots

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- 1 **Task 1:** COSMO Model Installation and Implementation (NMA, ARPA-SIMC)
 - Subtask 1.1: Development of the Test Suite
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- 3 **Task 3:** Documentation and Compliance with SCM Standards (NMA, USAM, HNMS)

Outlook of Future Steps

- Subtasks of this year \supset a first step of the development of the tools needed for a test bed (in compliance with SMC guidelines)
- Continuation \longrightarrow extend the testing methods to include:
 - a higher resolution version of the model (2.8 km)
 - use of various assimilation cycles
 - testing of performance under extreme weather events
 - other verification activities defined by the needs of the Consortium

Thank you for your attention!