WG5 - From Lugano to Sibiu: The steps we've taken

Flora Gofa

Participation to SRNWP meeting - presentation of WG5 activities to the verification session – Efforts to enhance the liasons between the consortia - Pending outcome from SRNWP-V programme on verification tools

Conditional and Weather-Defined Verification:

Tools to analyze COSMO model performance

Contributions from COSMO WG5 members

34th EWGLAM and 19th SRNWP Meeting, Helsinki, 8-11 October 2012

COSMO General Meeting Sibiu 2013

Extension of VERSUS for another year

STC requirements for VERSUS (software)
• COSMO tool for operational verification purposes for all COSMO countries
• further development of the code as a tool for scientific diagnosis and development of the model
• fulfillment of the coding standards

At SMC meeting in January 2013, the extension of the VERSUS project for one more year was suggested and a long term maintenance plan was asked to ensure the preservation of the software in good status the coming years

During VUS meeting (May 2013), priorities were defined for the last year as well as increased involvement of the participants to the realization of the Tasks (extended discussion will follow this afternoon)

Finalization of new Priority Task

After request from the SMC, a new priority Task was prepared with the aim to provide the common platform (ECMWF) for a standardized meteorological verification procedure of each new COSMO reference version against the existing one.

The PT:NWP Test suite is now approved by the STC, and will be under the coordination of WG5 (presentation will follow). The project will be led by Amalia Iriza (NMA).

To setup NWP test suit on ECMWF common platform a Special Project has been proposed and approved by the European Centre.

Kick-off meeting on Wednesday afternoon

New Common Plots Report structure

In 2012-2013 COSMO year some important upgrades have been done regarding the content and the structure of Common Plots Seasonal Report.

1. Conditional Verification for 2mT with both TCC and Wind speed have been added

2. Precipitation scores are now shown through Performance Diagrams in order to have several information at the same time reducing the number of plots

3. Standard Verification over a Common Area (except Romania) started since DJF season. The results are shown compared to standard domains

4. Use of Suspect Observation filtering function of VERSUS has been setup

Common WG3/WG5 strategy for model improvement

A brain storming meeting took place in Offenbach during the CUS 2013, where possible concepts of interaction between model development (in particular that of physical parameterizations) and verification have been discussed.

As an outcome, a document was mutually prepared and disseminated to the SMC and an interdisciplinary chapter will be added to the new SP to address this need for "Verification with feed back". Actions are expected.

WG3-WG5 document

Preparation of new Science Plan 2015-2020

Additional SMC organized in May 2013 with the aim to draft of the SP outline of each chapter defining the main areas of scientific interest in the consortium for the next years

In new Science Plan, interdisciplinary issues are tackled like model development, diagnostics, nowcasting, surface to atmosphere transfer, etc.

Important dates:
July 2013 deliverable of the outline for WG5 chapter on Validation and Diagnostics
Dec 2013 Completed chapter, ready for external reviewing

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Still a lot to be accomplished…..

Conditional Verification: start exploring new conditions trying to isolate deficiencies in the model, discuss at the VUS and then all produce these new conditions to look if they are visible in our different model configurations.

Common Plots: Extract feedback for the modelers and communicate the results to WG3, make useful condensed reports

EPS verification: Introduce basic probabilistic statistics of available EPS (e.g. LEPS) in the verification routine, explore VERSUS capabilities

WG Task List: Decide on the proposed amendments following also the new SP activities and have a responsible person in each Task that works towards that direction

Publications on verification applications

More……

Let's start!   COSMO General Meeting Sibiu 2013