



General Meeting 2014 - WG5 Parallel session – VERSUS2 meeting

Date: 8-09.2014, **Place:** Eretria, Greece

Participants:

Ulrich Damrath-UD (DWD), Flora Gofa-FG (HNMS), Dimitra Boucouvala-DB (HNMS), Pirmin Kaufmann-PK (MCH), Joanna Linkowska-JL (IMGW), Antonio Troisi-AT (USAM), Francis Schubiger-FS (MCH), Maria Stefania Tesini-MST (ARPA-SIM), Naima Vela-NV (ARPA-PT), Elena Oberto-EO (ARPA-PT), Anastasia Boundel-AB (RHM), Amalia Iriza-AI (NMA), Pavel Khain-PK (IMS), Alon Shtivelman-AS (IMS), Alexander Kirsanov-AK (RHM)

Minutes (per session): E.Oberto, MS.Tesini, F. Gofa

Item1: Science Plan

FG presented the reviewer comments and the answers provided to them.

[Action 1] A revised text with the answers will be prepared and communicated to the SPM, if additional comments will be given by WG5 members. The WG plan will be revised by FG and will be disseminated during the year.

Item 2: PT-NWP test suite

The final platform for testing each new COSMO version was presented by the PL, AI. A faster way to connect to ecgate for html transfer was suggested by AS and will be included in the final instructions.

Item 3: Common Plot Reports

[Action1] After exchange of opinion between the participants it was decided to keep as mandatory the verification of all 7km models, OOUTC run, over the Common Area and not the various domains. It would be desirable to have comparisons for the higher resolution implementations (2-3km) but as there is no common area to include, this could rely only on various domains and if the participant country wants to provide them

[Action2] Proposal: Cosmo members collect a report for a monthly synoptic situation or monthly rain report at least for the common area. Comments: for North Italy is too difficult to collect all this info →

skipped for the moment and only when available, unusual climatologically events will be reported for this area.

[Action3] UD has build a webpage collecting apart from verification analysis, all the general info concerning the model implementations. The request is for all the Cosmo members to update the models configuration table.

[Action4] Common Area graphs will be done by UD for the next year. The already available analysis that he performed with the data of the last 3 years will be an effort to put it online on COSMO web.

[Action5] DB will be the responsible person for the CP reports, making the comments for the graphs. As FG has requested FTEs to be attributed to each country and to the responsible member for this activity, the content of these reports has to be upgraded as well as the care for the data preparation from each country.

[Action6] Various domains verification will be excluded in the common plots (for the 7km implementation). Each country will perform the various domains verification and optionally the higher resolution one.

[Action7] Conditional verification over various domains is excluded from the common plots. A communication will start with WG3 (MS will contact Ines Cerenzia) in order to get recommendations for the new CV tests to be performed over the common area. The existing conditions (2mT with soil moisture, Windspeed with roughness length) will be performed the coming year over the common area, together with what will be proposed by WG3 scientists.

[Action8] Discussion on ways to communicate the CV results to the modelers, brought the proposal to organize a WG3/WG5 workshop the next spring, if enough tests/feedback is available. Moreover, the conditional verification results will be shown to Mathias and Jean Marie (WG3a,b coordinators)(dead line: March 2015). Afterwards we will wait for a feedback from them and for a new input for new conditions to be investigated.

[Action9] Upper air verification → not included to the CA reports but each Cosmo member can perform it. This can be done through Feedback files for some services as soon as this implementation is included in VERSUS.

[Action10] Request for driving models comparison over Common area (GME,IFS) at least for the common parameters as well as for the conditional verification tests : when it is possible, to perform the conditional verification for the common parameter. It was asked some person to perform CA verification also for these driving models; FG will do for IFS and UD probably for GME.

Item 4-11: Presentations of various verification related national activities

Item 12: VAST Project

NV presented the status of the VAST project, a COSMO sponsored activity for the development of a Fortran code that will be based on B.Ebert Fuzzy Toolbox. The work is included as a Task in VERSUS2 phase7, but as it is decided until now, it will not be included in VERSUS software, but it will be separate verification software.

[Action1] A close communication need to be performed between VAST team and LIBSIM team in order to install the latter as a tool for preprocessing of forecast and observation input files.

Item 13: Future of verification tools

Due to lack of time, this point was not extensively discussed. A presentation was given by FG, with relation to VERSUS software future maintenance and development plans (based on what STC had approved already from the phase6) and on the new concept of VERSUS system that implies that any new developments NOT related with “traditional” deterministic or with EPS verification, in the future could be performed outside VERSUS due to restricted long term resources in VERSUS development team. Due to the seriousness of this subject and in the anticipation of some guidelines from the STC, this issue will be discussed in a future meeting possibly during CUS.

Item 14: Proposal for a new PP/PT

AB presented a proposal for a new PP on spatial methods for very high resolution deterministic and ensemble systems. A separate meeting was organized and took place the following day.

VERSUS2 Meeting

Item 1,3: Status of PP phase6 and plans for phase7

An overview was given by AT for the status of the phase6 (similar to the Report that was sent to the SPM in August 2014 available in dropbox folder GM2014/VERSUS-docs:versus_report_06082014.docx). Main delay and postpone for the next year was the Feedback File implementation and the EPS testing phase which revealed many problems (discussed during WG7/VERSUS2 meeting) that need to be handled during phase7.

Plans for Phase 7 were presented, given in the following Tasks:

Task 0: Help Desk, Refinements VERSUS code

Task 1: Refinement of functionalities

Task 2: Imp. of functionality to ingest/manage GRIB2

Task 3: Imp. of station based forecast verification

Task 4: Introduction of additional statistical techniques

Task 5: Final Implementation of FF in VERSUS

[Action1] **Task 0.c** was deleted, **Task 0.d:** Test of each New VERSUS was decided to be deleted as each new major implementation will be accompanied by a test phase. **Task 0.e:** Test for the VERSUS 3.2 extra, will be performed by IMGW. **Task 0.f:** Test for the concurrent use of VERSUS by more than one user, is **not yet attributed(?)**. **Task 0.g** Feasibility Study to increase the loading performance will be performed by MCH, PL-team. Task1b, EPS refinements to be decided after meeting with WG7 (already available now). Task 2d, test phase after the ingestion of GRIB2 implementation, to be performed by DWD. **Task 2.b,** test phase of station based verification forecasts, to be performed by MCH. **Task 4.extra,** testing of LIBSIM, is not assigned yet, but will require 0.05FTEs for each participant. A test phase following Task 5, implementation of Feedback Files, was added and will be performed by DWD as is the service with availability of such data.

[Action2] Discussion was held on the removal of the maintenance and development plan that was removed from the last version of the phase7 plan, and it was agreed to add it back. It is necessary from all the users to reevaluate the status of the various new implementations of the software since they are

included. Also some bug reports and operationality issues need to be faced before the project is concluded, or else a further extension can be considered. For these reasons, it was decided that it is of high importance especially this last year of the project to have a VUS meeting (needs to be added in the plan too), where the users will have a chance to meet with VERSUS developers and get acquainted with last implementations or any last issues. AT reported that it is not clear whether CNMCA can host this meeting in its premises, but after consultation with ARPA-PT, VUS can be possibly organized in Torino (decision for date/place is expected from the PL).

Item 2: Status of VERSUS at MCH

FS presented some existing problems with the operational use of VERSUS at MCH. Some of these are:
EPS verification problems (more in WG7/VERSUS2 minutes)

Multi user verification calculation simultaneously

Software repository cleaning

Better control over 'Clear Queue', information on job status and access to log file, warning if not empty

XML import format needs to be finalized

Addition of other interpolation methods (9 points)

Suspect observation application to all models with one registry

Update of existing station metadata

Errors in automatic storing of graphs

Unclear information in Scatter plots web gui (time steps choice)

[Action1] Replies/solutions were already given prior to the meeting from the VERSUS team, AT kept note and will take care of the remaining ones.

A revised version of phase7 PP plan needs to be prepared taking into account some of the abovementioned Actions/Decisions.