

Minutes of COSMO TAG Meeting, 17 July 2013 (14:00 – 16:00 CET), videoconference

Participants: COSMO Software Administrators (Uli Schättler (US), Jean-Marie Bettems (JMB), Adriano Raspanti (AR)), TAG Coordinator (Massimo Milelli (MM)).

Chair: Massimo Milelli (MM)

Minutes: Massimo Milelli (MM), Adriano Raspanti (AR)

Point 1: single Column Model (SCM) with TERRA standalone: a new COSMO software with a responsible person and, therefore, a new TAG member ?

The Single Column Model (SCM) is not an official COSMO software and at the moment no action towards this direction is planned at DWD. If there are requests from the partners, there should be a formal communication from SMC/STC to DWD. If this is the case, US proposal is to absorb SCM into COSMO in order to have a unique code.

DECISION: the TAG agrees that this is the best way to proceed. No deadline is given since the task has not started.

Point 2: work on chapter 7 of "COSMO Standards for Source Code Development"

According to US the work on Chapter 7 of "COSMO Standards for Source Code Development" has a quite low priority, therefore he proposes to finish it by September 2015.

DECISION: the TAG agrees and reminds the SMC that there is still a problem of resources.

Point 3: elaboration of the 'common library issue' (e.g. for COSMO and Fieldextra)

US informs that he plans to organize a meeting in Offenbach after the GM (autumn) in order to discuss with ICON people, 3DVAR people and JMB the organization of the work. JMB reminds that some work has already been done within the frame of a previous PT; the lesson learnt was that it is not easy to write a portable library which is efficient in both the COSMO model and Fieldextra (data structures, memory usage). JMB welcomes the idea of a kick off meeting.

DECISION: after the 'common library' kick-off meeting TAG and SMC will be informed about the planned actions (presumably during the usual SMC video conference in December).

Point 4: preparation of COSMO common strategy for post-processing

JMB proposes that anybody planning to introduce some post processing into some COSMO software should inform TAG. TAG would then decide where it is better to have it (e.g. in Fieldextra, in Versus, or in COSMO).

DECISION: the TAG accepts the proposition which has to be communicated to SMC and then, if accepted, to the partners.

Point 5: preparation of COSMO Implementation Documentation skeleton

JMB asks US to better explain the difference between the chapter 7 of the "COSMO Standards for Source Code Development" and the implementation documentation. US says that the first one is meant to introduce the programming rules, what is accepted or not in that context, the most efficient way to program, how to make useful comments, and so on, while the Implementation Documentation should describe in details the parallelization rules (for instance), the way to decompose the domain, the I/O and so on. MM asks whether these two documents could be joined into one and US thinks this is not possible. According to him, this task has a higher priority than Point 2, therefore he proposes September 2014 as a deadline.

DECISION: the TAG accepts the proposition.

Point 6: implementation of source code management pages for official COSMO software other than COSMO-model and INT2LM

Versus and Fieldextra are already well documented although not using the same standards of the COSMO model. Versus is documented through an online technical documentation, that is almost ready and is available with the software itself, and User and Technical Manuals that will be updated soon. Moreover the source code management pages on Cosmo website have been used to track the history of project developments and the future implementations are described as well. These pages need a review and an update after the last official deliveries of the software. MM asks for the documentation of Extpar and JMB explains that it is already available at CSCS (user guide, history of changes for V2.0). Moreover he informs that there will be a special session about Extpar in Sibiu, on Monday 17:15-18:15.

DECISION: the Extpar documentation will be put on the COSMO web pages after the GM.

Point 7: the web page item has been completed because Theodore has already implemented the requested modifications

This point has not to be discussed, it is just an information in order to close definitely the task discussed during the previous meetings.

Point 8: Version control of COSMO Software: any need to define a standard policy (master repository, accessibility for COSMO members ...) ? Currently each software is managed differently, some codes use distinct and independent repositories (e.g. EXTPAR), access from outside is normally not possible, ... One benefit of a common repository open to all authorized people is a much faster access to bug fixes and other improvements

In principle it would be useful to have a single repository with all the software, but then technical problems arise: where to have a server, where to find the money (COSMO funds ?), who maintains it.

DECISION: MM will inform the COSMO community about the current situation of the software repositories (location, tools, accessibility...). The input will come from US (COSMO, INT2LM), AR (Versus), JMB (Fieldextra, Extpar).

Point 9: Interface fieldextra / VERSUS. How to verify post-processed model output (e.g. location specific Kalman or MOS corrected output)? A standard way to ingest post-processed model output at a collection of grid points is needed in VERSUS. Fieldextra does provide different ASCII output format which could be used for this purpose, for instance the ATAB format (XLS_TABLE)

There is a general agreement between JMB and AR on the subject, but this has to be coordinated. The usefulness of a pre-defined ASCII format for exchanging non standard information (both forecast and observation) between different systems is evident and has to be analysed and exploited.

DECISION: there will be an informal meeting between AR, JMB and other Versus users in Sibiu to better discuss this point. AR has the lead to organize the meeting.

AoB1: JMB proposes to have a TAG mailing list and this has been accepted: the request will be transmitted to Andreadis by MM.

AoB2: AR introduced briefly the issue about the use of LIBSIM as preprocessing tool for VERSUS, especially to produce "super-observations" and "super-forecasts" in pre-defined box. Finally he suggested, to avoid duplications and to efficiently benefit from the potentialities of different tools (like also Fieldextra), to coordinate the activities with JMB, keeping him in the loop of discussions, trying also to organize an informal meeting in Sibiu with colleagues from Arpa-SIM.