

Summary of the ESMF Change Review Board Meeting on Feb 23, 2010.

Attendance:

Robert Ferraro/JPL, Cecelia DeLuca/NOAA/CIRES, Atanas Trayanov/NASA GSFC, Alan Wallcraft/NRL SSC, Tom Black/NOAA, Scott Sandgathe/NUOPC, Tim Campbell/NRL SSC/NUOPC

Agenda

The CRB covered the following topics during its meeting:

Introduction of new CRB member – Tim Campbell/NUOPC CSC
Development status and schedule review

A synopsis of the discussion and decisions from the meeting is presented below. It is organized by agenda item. These notes attempt to capture the high points of the discussions, and any decisions that resulted.

Introduction of new CRB member

Tim Campbell is joining the CRB representing the NUOPC Content Standard Committee (CSC). The CSC has the charge to take the recommendations from the NUOPC Interim Committee report and develop the implementation details. The initial thinking is for a layer on top of ESMF. This is all still in the early stages – the CSC is working on the details.

NUOPC has completed Phase 1 and is now in Phase 2. The objective is to enable the merger of the Navy and NCEP forecast ensembles into multi-model ensembles. The plan is to develop an interim common architecture in the next 2 years, with a goal to have an initial multi-model ensemble implementation within that timeframe.

Initial requirements from the CSC should be available by the next CRB meeting.

Development Status Review (Cecelia DeLuca)

The Core Team continues to work through the development list as posted on the ESMF web site. The Core Team manager went through the list of tasks scheduled for the March 2010 release, giving the status of each task. Approximately half of the tasks scheduled for March will be completed on time. It was recognized that the March task list was aggressive when it was scheduled, and would proceed on a best efforts basis. Development issues have arisen with the scalability of reconcile, and conservative regridding. Tasks like the tri-pole grid shortcuts, multi-tile grid representation, and conservative higher order dimension regridding are dependent on the availability of a particular developer for efficient progress to be made, and so will not be ready for V5.0.0. Exchange grids are also dependent on the completion of the 2D regridding capability. Still, conservative 2D regridding is expected to be completed for the March release, which will break the logjam on the rest of the specialized grid tasks.

There was discussion within the group about whether to wait for more tasks to be completed on the V5.0.0 list or release with a subset of the scheduled tasks. Waiting for a significant number of the remaining 11 tasks to be ready would likely result in a June release. Releasing what is available in March is not without cost. Several weeks of developer time are consumed in freezing a release version, testing, and documentation, so the cost of splitting a release into 2 is not zero. However, the goal of having a stable public release in the fall argues for releasing the newly available regridding functionality sooner rather than later. A v5.0.0 internal release in March will give beta testers the best chance to uncover issues in the regridding and other delivered functionality before a public release in the fall. The public release this fall will mark the start of a commitment from the ESMF developers to maintain a backward compatible API and functionality.

CRB members were polled to see what their current state of adoption is within the ESMF versions. The following were reported for “production” codes:

COAMPS	ESMF v4.0.0r
GEOS-5	ESMF v3.1.0rp2
HYCOM, CICE	ESMF v4.0.0r
NCEP	ESMF v3.1.0rp2

The version 3.1.0rp2 users will likely wait for v5.0.0r before upgrading.

Adjustments to the Current Schedule

The v5.0.0 Internal Release has been kept on the schedule for March 2010, but with a subset of tasks (the 1st 8 on the old March schedule, plus concurrency, 2D regrid, and cubed sphere regrid) originally scheduled for that release.

A new Internal Release V5.1.0 is now scheduled for July 2010, which picks up the tasks not completed for the new March release. The v5.1.0 release is necessary as a matter of policy if these items are to be included in the fall public release. The public release ESMF v5.1.0r is kept on the schedule for Sept 2010, but that date is expected to slip to accommodate adequate testing of v5.1.0.

Next Meeting

The next meeting is tentatively scheduled to take place at the end of May or early June 2010. The specific date is TBD.