

Minutes of the working group session on system aspects

Performances issues :

there is a general agreement that we need an exhaustive benchmark on LAM assimilation. Performances problems on 3DVar as well as on Canari have been reported, though for the latter solutions are on their way according to REK's talk.

The « mitraille » testbed is acknowledged to be insufficient to identify performance issues, and even to be a difficult place to support a data assimilation testbed (CF). REK recalled his past proposition of a « Benchmark's mitraille » but this is an extra task which requires manpower (what is we all lack of) and can't start before a sufficient scientific and technical validation has been achieved. A suggestion has been to take advantage of the Centers which will need to prepare their computers replacement to ask them to provide a benchmark report for the community. SMHI volunteered to be the next one.

Training of experts :

To solve performance issues we need to have a scientific expert and a code expert working together, but also for practical reasons we often need a third person to do the job « physically ». Video-conferences may help to join these people together, but it also needs extra-work for the preparation of the video-conference. Against this vicious circle we need the developers to invest themselves in specific topics – either scientific or technical. Regarding the lack of OO experts especially, Hirlam will organise an internal training course on C++.

Source code repository :

CF recalls that Meteo-France will switch to Git in February or March 2013, with the aim to keep the same functionalities that ClearCase. For now, we don't know yet whether the cycle 39t1 will be on Git or ClearCase. ECMWF is considering to change Perforce to Git. Hirlam is considering adopting Git as well. At meteo-France, discussions are on way to make the source code repository on Git visible but not writable from outside. CF insists that the situation of today help us make well-structured contributions. The cycle 38t1 is going on smoothly, and better than the previous ones. To Hirlam this means to put more importance on the common cycles with ECMWF, and consequently the planning is of higher importance.