

Minutes from the 5th LACE Steering committee Meeting

Prague, 22-23rd September 2005

Participants:

LSC Members: Yong Wang (Austria), Martina Tudor (Croatia), Radmila Brožková (Czech Republic), András Horányi (Hungary), Jan Mašek (Slovakia), Mark Žagar (Slovenia).

Management Group: Dijana Klarić (Project Leader), Filip Váňa (Working Group Leader for dynamics), Neva Pristov (Working Group Leader for physics), Gergely Bölöni (Working Group Leader for data assimilation), Oldřich Španiel (ALADIN/LACE System Coordinator).

Observers: Gwenaëlle Hello (Météo France), Maria Derková (Networking Aspects ALADIN 2 Coordination), Per Undén (HIRLAM), Martin Janoušek (CHMI), Doina Banciu (ALADIN).

1. Opening (*Ivan Obrusnik*)

The Director of CHMI, dr. Ivan Obrusnik welcomed the participants and opened the meeting.

2. Organizational matters (*Radmila Brožková*)

The organizational matters of the meeting were explained by Radmila Brožková.

3. Adoption of the Agenda (*Mark Žagar*)

The agenda was adopted with few modifications: the ordering of some items.

4. The budget status for 2005 R&D part (*Dijana Klarić*)

Dijana Klarić gave a short review of the 2005 budget. Part of the cost for the workshops and trainings will be taken from the reserve. The actions that were not announced soon enough in advance will be financed from the savings. There are more requirements for workshops and trainings in 2005 (e.g. WS in Oslo). There will be additional 2 weeks for work in assimilation (8 week stay in Budapest instead of 6). Also the lecturers from LACE countries on AROME and ALADIN workshops will be paid by LACE. The PL has been asked to prepare as close an estimation of the R&D costs in 2005 as possible in order to devote all available financial means for the active R&D subjects.

5. Technical Issues – Status of operational activities at Member Services, including telecommunications used for downloading the coupling files

PL was to investigate the possibility to prolong LBC to 72h. Emmanuel Legrand responded that this still conflicts the operational post-processing in Meteo France. When 29t2 becomes operational we have to ask again for the prolongation.

There were a few of rain events this summer that were predicted unsatisfactory by different LACE members using different cycles with different physics. Therefore the coupling model is now suspicious. As first trial, humidity scores of ARPEGE analyses were looked at and there is a systematic moistening of the lower layers during the past few years. However nothing alarming was found in these scores and it is not certain if the humidity is the right track. Nevertheless some more in-depth analysis would be beneficial.

Each representative has reported the status of the ALADIN-related operational activities in the native service in advance so it was not discussed in detail.

6. Technical issues - Short information on the RETIM 2000 status

The LBC retrieval detailed statistics are available in each Members report. Most of the time internet is used for the retrieval of the LBC files. RETIM is scarcely used since it is slower and in some services less reliable than internet. Considering its price, alternative (cheaper and/or more reliable) backup solutions should be taken into consideration:

- The backup could be achieved through ECMWF through the direct line. The MF would provide the data also on some ECMWF machine.
- RMDCN
- following the example of Romania; having two internet providers (this option means that Meteo France should have two internet providers)
- LBC from ECMWF (IFS run)

Members underlined that access to LBC via internet has up to 5% error. Since this is unacceptable from the operational point of view (max. 1%), the members must have some kind of backup. However, RETIM is found to be an expensive solution for backup as it is seldom used and found to be less reliable than the first solution in few Member services. The PL was asked to investigate with Météo France the possibility to upload the LBC files from Toulouse to Reading to be used for backup purposes. However, in case we drop RETIM as the backup solution and rely to ECMWF lines instead, a separate solution must be found for Slovakia.

6.1 Update of the common LACE LBC files (Maria Derková)

Change of the area covered by LBC was cancelled. The discussion switched to the one about new climatological files and new fields in LBC files.

HU would use the additional levels above the current ones in the assimilation of the satellite data. The conclusion is that LBC will contain data on 46 levels of ARPEGE.

LBC file content (additional fields): no 2nd order packing available yet, the future LBC files will contain warning index, prognostic snow albedo, ozone and aerosols. Microphysics is only a

matter of research and will not be used for the operational purposes yet while the increase in the LBC file size is considerable. The code modifications are needed to use the constant fields from the climate file, but are not yet ready.

7. Technical Issues - Reports of ALADIN/LACE System Coordinator and Data Manager

System Coordinator (ASC)

ALADIN/LACE System Coordinator (ASC) reported on his work done in 2005 and proposed a plan for 2006. LSC was informed that for 2006 only one ALADIN phasing has been announced (spring) and thus the proposed level of the ASC activities can be covered by a 6-months contract. The members accepted the ASC report but remarked that also the spring 2006 ALARO0 actions can be covered by the ASC.

Data Manager (DM)

The PL informed LSC about the lack of candidates for the DM position. Croatia will devote 6 month stay of Lovro Kalin in Ljubljana later this year to the common ALADIN verification effort. Still, the verification team should be enlarged by one more person (4 weeks are still planned for 2005 for the second candidate).

We badly need data manager and we kindly ask to have one. Due to the recent loss of manpower related to the verification software and database maintenance and development its work is not regularly supervised. In Slovenia they got a new server so the database will be moved to the dedicated server probably within one month. It is important to find a person working on verification in any of the Member services who could develop some monitoring tool that would allow easy monitoring if all the data have been received. This person should be identified until 10th October. Afterwards an e-mail to coordala will be sent to find a person outside LACE.

8. Meteo France operational and ALARO/AROME events since the last LSC meeting

Gwenaëlle Hello gave a presentation about recent developments since February 2005, including the current double suite run in MF.

Use of the Lopez scheme in microphysics has introduced beneficial impacts. There is less noise in the precipitation fields and the cloudiness forecast has improved. However, due to the degradation of the scores in the long range forecast in the middle of the atmosphere, the properties of the cloud ice have been tuned. The CPU increase due to microphysics is 15% and RRTM 20% (with respect to FMR).

MF representative also gave a short review of the progress described in the report sent prior to the meeting. There will be MesoNH, SURFEX and AROME code management, but not at the same time. AROME spends 3 times the CPU per grid point ALADIN does.

9. Information about the HIRLAM-ALADIN cooperation

In Split assembly the cooperation got approval from directors. CSSI group was renewed and made a common plan to be approved by the end of this year. CSSI had discussion with HIRLAM management during the ALADIN workshop in Bratislava. Basic principles were agreed and few steps that will be taken. Idea is to have 3 plans, one for HIRLAM one for ALADIN and one common plan. The common subjects will be presented for the HIRLAM and ALADIN assemblies. HIRLAM is encouraged to participate in phasing. We should have a cooperation agreement. It is being compiled at the time. Soon we will have a version that could be discussed before the assembly.

10. Research and Development Issues - Working groups

Dynamics and coupling

Most of the tasks for 2005 are fulfilled. Some tasks were not fulfilled since there were people missing on the subjects. The not completed tasks are postponed for the next year. It would be useful to get a list of topics where the volunteers are needed. Also a tentative working plan for 2006 has been proposed.

Physics

Neva Pristov presented the fulfilment of the physics working plan for 2005, including 3 not yet completed subjects that require contributors. She also presented the plan for ALARO0 physics. 3 volunteers are needed for GWD, large scale precipitation using Lopez and non precipitating shallow convection.

Data assimilation

Gergely Bölöni summarized the efforts for the fulfilment of the 2005 plan as well as the possible plan for 2006. The preliminary plan for 2006 will be updated during the Maintenance and assimilation workshop in Budapest.

On the last LSC data assimilation WGL proposed to have a new working group for LAM-EPS. There is lack of flow of information between the 3 countries that intend to do similar job so it would be good to coordinate this work. This emphasizes the need for LAM-EPS WG to coordinate the research. This could be a WG for LAM-EPS and predictability. For now assimilation, LAM-EPS and predictability research have been coordinated by WGL for Data assimilation.

This working group should be divided into two, one for data assimilation and the other for

predictability. The increased interest and need in work on predictability among the LACE members has initiated the necessity for another working group – the one for predictability. The coordination of such work has been done by the working group leader for data assimilation but the need for the closer cooperation and more coordination in the future present strong arguments for initialization of the fourth working group on predictability. Yong Wang expressed the need for better coordination of work on predictability.

Conclusions:

LSC proposes to establish the fourth working group because it is very perspective subject and shall require more coordination.

Czech representative regrets that no scientific results and their synthesis were presented to LSC. This makes it difficult for the committee to work out honest appreciation of the ongoing research and give to Council any meaningful view on it. This would endanger the endorsement of research plans by LSC if it continues.

Resolution:

LSC requires the LACE MG to add the synthesis of scientific results to the reports. The reports should not be read at the LSC session point by point but serve as a basis for the discussion of the achieved results and future plans.

11. RC LACE review

The subject of the need and usefulness of the evaluation at this time has been raised. Some LSC members feel it is not the right moment for the evaluation due to the new ALADIN structure and brings additional instability in the moment when we will have prolongation of MoU and that it is not a good idea to spend the reserve on this issue. However, it was argued that it is better to have a review now but not to take its advice in a hurry, so MoU should be taken for longer than one year.

LSC states that we should either have evaluation now and prolong MoU for 2 years, or prolong the present MoU for 3 years and have a review later (e.g. In 2 years). The Terms of References for a review should be proposed within next few weeks and collected by the LSC chairman, and given to the PL.

12. ALADIN and LACE MoUs

12.1 LACE MoU

The proposed MoU is accepted with minor changes. Some points of the MoU should be re-ordered and the budget should be adapted to the structure with 4 working groups.

12.2 ALADIN MoU

LACE would like to have a clear definition of the link between ALADIN with LACE projects

regarding budgetary issues. LSC chairperson will express the view of the LSC to the LACE directors.

13. Proposal for the 2006 budget

LSC was explained the point 2.1 of the proposed 2006 budget. For the point 2.2 for MG missions, Austrian representative objected the increase of the per-diem, and called attention that ZAMG per-diem for LACE countries is 23.5 EUR, and for north-European countries it is 32.7 EUR. However Czech representative proposed to distinguish between the expensive and cheaper countries. A list of expensive counties should be prepared by PL and approved by Council. The per-diem will remain 40EUR but could be increased for missions in more expensive countries.

Point 2.3: LSC supports the increase of the Management Group missions but recommends better explanation and justification for it to be better argued and explained by PL in the budget proposal for 2006. An increase of the WG salary and R&D mission per-diem due to inflation, increased costs of living, travelling and accommodation that were ignored during the last 3 years was proposed by the PL.

Czech representative expressed the view of CHMI as concerns the budget proposal for 2006: The proposed increase is too high for CHMI and compromises should be searched between the valorisation of salaries, missions and introduction of the fourth group for LAM EPS. CHMI proposal is to open the new position of LAM EPS WGL only after the external review of LACE takes place but supports to start with the increase of R & D stays by 2 months for the Data Assimilation & LAM EPS Group. Per-diems should be modulated in function of destination countries.

Czech representative added that the valorisation of salaries should be estimated using rather the average inflation rate of LACE countries than the ECMWF rules.

14. Information about the Special Project at ECMWF

András Horányi reported on the recent activities and progress in regard of the special project at ECMWF. It is waiting for the ECMWF approval by TAC that should come in October, there are no foreseen formal objectives to this project. Claude Fischer is the contact point on how to proceed after the project approval/acceptance.

15. Recent information on MAP/FDP (Yong Wang)

At the 4th LSC Yong Wang presented the background and roadmap for the last phase in the MAP project, the so-called D-phase, or MAP Forecast Demonstration Project.

Yong Wang reported on the news since February. The demonstration period is postponed to June-November 2007. The project has not found sufficient support so alternative sources of funding are being considered.