

**ALADIN LTM meeting**  
**Wednesday 2<sup>nd</sup> October 2013**  
**18:00-20:00 Antalya, Turkey**

**Minutes**



**Participants**

**ALADIN Program Manager** : Piet Termonia

**LTM and representatives :**

Algeria :

Austria : Florian Meier (dep LTM), Christoph Zingerle

Belgium : Alex Deckmyn (LTM), Rafiq Hamdi

Bulgaria : Andrey Bogatchev (LTM)

Croatia : Alica Bajic (LTM), Dijana Klaric

Czech Rep : Petra Smolikova (dep.LTM), Alena Trojakova

France : Claude Fischer (LTM), Ludovic Auger, François

Bouyssel

Hungary : Gergely Boloni (LTM), Mate Mile

Morocco : Karam Essaouini (dep.LTM)

Poland : Marek Jerczynski (LTM)

Portugal : Maria Monteiro (LTM)

Romania : Mirela Pietrisi (dep.LMT)

Slovakia : Michal Nestiak (dep.LTM)

Slovenia : Neva Pristov

Tunisia :

Turkey : Ersin Küçükcaraca (dep), Tayfun Daykilog, Fatih

**ACNA:** Maria Derkova (Mariska)

**LACE Program Manager** : Yong Wang

**Support Team** : Patricia Pottier

1. Opening and welcome

Mariska opens the meeting and recalls that, as announced when sending the preparatory documents, the dense agenda of the meeting doesn't give room to repeat the contents of the preparatory documents that will be discussed in the meeting.

2. Adoption of the agenda

The agenda is adopted without modification.

3. Telecom clim files testing

Mariska and Claude explain the need to upgrade the climate files used for the LBC production on telecom resolution for all Partners coupling their local ALADIN/AROME with ARPEGE : the change is connected with the migration of MF operational suite on new BULL supercomputer.

This summer, some test sets of clim & LBC files were created on NEC and checked by all Partners (no technical problems found); a problem with spurious lakes on the Belarus border has been reported by the Czech Team and is under correction at MF. Then, new sets of clim and test LBC files will be prepared by MF on BULL : these are to be investigated and tested by the Partners as they did this summer with files prepared on NEC.

Next step, the clim and LBC files will be produced daily on the BULL mirror-suite and available on cougar (and most probably not via BDPE). During this period, Partners could possibly run a parallel suite at home.

Afterwards, Partners will have to simultaneously switch from their local present operational telecom clim files (NEC versions) to the new clim files (BULL versions), in one single go, at the time of migration of MF's production throughput from NEC to BULL. This switch is planned around mid-December. The date will be announced in advance but will remain subject to final confirmation (hazardous weather situation on that day, unforeseen last minute technical problem) and an emergency switch back to NEC cannot be completely excluded.

Mariska insists on the high level of coordination and communication implied by this synchronized exercise.

During the time of the switch, Partners will be kept informed directly by MF Operations via the "operala@meteo.fr" diffusion list.

Patricia will check the content of operala.

Andrey, Ersin and Alica would like to also update the clim files of their forecast domains (coherence and benefits from ECOCLIMAP1 data).

Claude will check with Françoise when the e923/PGD scripts can be made available on BULL for the Partners. The Partners will have to learn how to use them on BULL. It might be appreciated if a help from Partners to prepare those scripts on BULL is provided.

#### 4. The export version

Claude explains that MF has validated the 3D-Var ALADIN and AROME assimilation on cy38t1\_bf.03 (clearcase naming). The export version package is ready (including namelists for ALADIN-Reunion and AROME-France-3D-Var, technical memorandum, ..).

Alena explains that the cy38t1\_bf.03 compiled in Toulouse was tested for ALARO-0 and judged acceptable. LACE considers moving to this basis.

Thus, the LTMs agree that the export version cy38t1\_bf.03 can be officially declared and the package produced as soon as CHMI sends to Claude the ALARO-0 namelist (to be included into the package).

#### 5. The arrival of Fortran 2003 inside the IFS codes

Claude explains that specific features of F2003 will enter the IFS code, in order to ease the modernization (and oopsification) of the codes. In view of Cy41 (June 2014), each partner was asked to check the compilation of a specific test program for 6 features of F2003 and to send feedback to MF (any other information about compiler upgrades and compatibility with F2003 was welcome). Claude stresses that all Aladin teams sent feedback to this inquiry. Most standard compilers support the six features; for those not yet supporting all six features, it was recommended to contact the vendors in order to upgrade as necessary the local compiler revision.

Claude underlines that CY41 is aimed to be declared by June 2014, thus no export version will be based on this cycle before (probably) beginning of 2015.

For the longer term, it is recommended that the OOPS C++ layer (set of test programs) and the C++/Fortran toy model codes are added by Partners to any future benchmark, in view of a Call for Tender for HPC. General compliance of compilers with C++ (and Boost) and F2003 norms should also be included in the technical requirements submitted to vendors.

The 6 features of F2003 were OK for most of the Partners.

Petra explains that NEC SX compiler doesn't support 3 over the 6 features and NEC refuses to upgrade its compiler (as it isn't in the maintenance agreement between CHMI and NEC).

Ersin explains that their Intel v11 compiler doesn't support 1 feature : as Itanium processors are no longer developed, there won't be any compatible evolution of Intel compiler (no v12). Hu has problem with one Fortran2003 feature out of the 6 (the same as reported by Ersin), due to the old Intel compiler (11.1) installed. A compiler upgrade to 13.x is foreseen for 2014-15, which could solve the problem.

Alena asks if the F2003 will be spread in the code or if it will be localized and thus will allow some back-phasing. Claude doesn't know precisely how many routines will be affected but the accepted F2003 features are likely to quickly scatter within the code.

Piet explains that ALADIN has to take a position as a consortium and the accepted features result from a compromise between MF, ECMWF, the HIRLAM and ALADIN consortia. This question goes beyond the scope of this LTM meeting.

It is decided that Claude will pass the information about Cz and Tk problems with the features of F2003 to the ECMWF coordinator for system aspects. Then, Claude and Piet will raise the problem at the level of PAC or GA if necessary.

## 6. Progress and Plans of Cycles and O/E-suites at MF

MF plans about the forthcoming R&D code releases and plans at MF about migration to BULL HPC and E-suite/operational implementations are detailed in Claude's preparatory document.

LTMs should consider answering to the open calls for phasers :

- 2 phasers for 3 week each in December 2013
- 3 phasers for periods of 3 to 6 weeks over January/February

For the spring/summer phasing CY41, MF plans to invite about 4 phasers.

## 7. Use of GIT

Claude explains that, from CY40, MF will no longer use the source code management tool (clearcase) but will switch to GIT. The GCO team has developed a top layer on GIT, reproducing the clearcase functionalities (GIT-tools). An English documentation is available on the aladin website and those who will come to Toulouse will learn how to use GIT-tools.

Alena asks for the GIT-tools to be available locally for Partners.

Claude reminds that the use of this top layer needs access to internal MF machines (databases, ...) and, thus, works only inside MF network (from Toulouse, or remotely through the fire-wall).

Petra precises that some Partners would like to use GIT-tool for own home code management, not in order to synchronize source code management with MF.

Claude will ask COMPAS/D and GCO team about the possibility of providing GIT-tool for this local use.

## 8. Man power commitments for the rolling workplan

Piet explains that the ALADIN\_HIRLAM rolling working plan must be updated. Its redaction

procedure has been improved and now includes LACE Area Leaders, for a better harmonization of LACE work within the ALADIN-HIRLAM working plan.

Patricia has frozen the version (V1) of the rolling working plan on googledocs, as it was at the end of September (it contains no significant modifications since the last GA); a second version (V2), based on this V1 version, is now available and must be updated by CSSI members, HMG and LACE AL. Patricia will give all of them access to this document (V2) and will send a call for quick contributions to all of them.

Piet reminds that the Directors want to see the priorities and the manpower associated. **Piet asks the LTM to fill the rolling plan (V2) with the names and number of working weeks** of their team. Deadline is October 25 (2 weeks before the GA). The googledocs is already opened to LTMs but they might prefer to wait within 1 week for the updates by CSSI, HMG and LACE AL. **Patricia will send a call for contributions to the LTMs.**

## 9. Newsletter

Patricia announces the **publication of the 1st common ALADIN-HIRLAM newsletter**. This number 1 is scientific articles oriented : it mainly contains articles written from some key presentations during the ALADIN WK/HIRLAM ASM in Reykjavik last April. For **number 2**, Patricia proposes to have articles about the **recent PhDs** (3 defenses during the last year), a **“Tour d'ALADIN”** based on Piet's presentation at the next General Assembly and a **list of events** (announcement or summary). HIRLAM already agrees with this idea. The proposal is accepted by the LTMs and Patricia will contact possible authors after the General Assembly, for a publication at the beginning of 2014.

## 10. Planning of future meetings

Patricia reminds that the next meetings are announced on the aladin website agenda :

- ALADIN Bureau web-meeting : 23 October 2013
- General Assembly : 14-15 November 2013, Tunis
- 24th ALADIN Wk & HIRLAM ASM 2014 : 7-10 April 2014, Bucharest (including LTM meeting on 8 April) + HMG/CSSI meeting on 11 April
- 2nd HAC/PAC meeting and 11th PAC Meeting : Lisbon, 19 May 2014 (or 12 May, to be confirmed)
- EWGLAM meeting : 29 September – 2 October 2014 in Offenbach

**The LTMs agree on their next meeting being organised besides ALADIN Wk in Bucharest on Tuesday 8 April 2014** (to be confirmed, depending on the whole agenda of the workshop).

## 11. Forthcoming training courses, work meetings

Mariska reminds some training courses to be organized till the end of the year :

- Nordic SURFEX course, November 25-28, 2013, Norrkoping, Sweden
- joint HIRLAM/ALADIN/ECMWF C++/OOPS 4 Days Training Week, ECMWF , November 11-15, 2013
- Very Fine Resolution internet meeting, October 10 2013 , EUMETCAL Sabameeting
- ALADIN System working week October 21-25 2013, Ankara, Turkey

## 12. AOB

Piet thanks Mariska for her efficient preparation and chair of this meeting, as ACNA. Piet also thanks Claude for his key role, answering most of the questions from the LTMs.

**Annexe : Agenda with list of preparatory documents**

Agenda	Introduced by	Decision, comments, information	Documents
1. Opening and welcome	ACNA		
2. Adoption of the agenda	ACNA		Agenda
3. Telecom clim files testing	ACNA&ST	report, discussion	LTM_Antalya_3
4. The export version	ST	information	
5. The arrival of Fortran 2003 inside the IFS codes	ST	information, comments&questions	LTM_Antalya_5
6. Progress and Plans of Cycles and O/E-suites at MF	ST	information	LTM_Antalya_6
7. Use of GIT	ST	information	doc on MF web
8. Man power commitments for the rolling workplan	PM	Information on procedure comments&questions	LTM_Antalya_8
9. Newsletter	PM	information	
10. Planning of future meetings	ACNA&PM	discussion	LTM_Antalya_10
11. Forthcoming trainings, courses, work meetings	ACNA	information	LTM_Antalya_11
12. AOB	ACNA		