# 21st ALADIN LTM meeting Tuesday 4 October 2016 17:50-19:50 Rome, Italy

#### draft minutes



## **Participants**

**ALADIN Program Manager: Piet Termonia** 

LTMs and representatives:

Algeria: no representative
Austria: Clemens Wastl (dep. LTM)
Belgium: Alex Deckmyn (LTM),
Bulgaria: Boryana Tsenova (dep. LTM)
Croatia: Martina Tudor (dep. LTM)

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

France : Claude Fischer (LTM)

Hungary : **Balaz Szintai** (LTM)

Morocco: Hassan Haddouch (LTM)
Poland: Marek Jerczynski (LTM)
Portugal: Maria Monteiro (LTM)
Romania: Simona Briceag (dep. LTM)
Slovakia: Michal Nestiak (dep. LTM)

Slovenia: Neva Pristov (LTM)

Tunisia: **Hajer Dhouioui** (dep. LTM)

Turkey: **Alper Guser** (LTM)

LACE Program Manager: Yong Wang ACNA: Maria Derkova (Mariska) HIRLAM observer: Daniel Santos Support Team: Patricia Pottier

#### 1. Opening and welcome

Mariska opens the meeting and welcomes the participants : all ALADIN partners but Algeria are represented; we also welcome Daniel (HIRLAM Project Leader for System), as HIRLAM observer.

#### 2. Adoption of the agenda

The proposed agenda (see Annex) is adopted, with an additional point about the e901 configuration in AOB.

## 3. ARPEGE with SURFEX => impact on LBC

A document (Doc3) was prepared by Météo-France to explain one important change in the forthcoming ARPEGE E-suite: the arrival of SURFEX in the global model forecast production. Thus, at the time of the operational switch (planned for the first quarter of 2017, likely in March), the surface fields in the LBC files will be produced by SURFEX instead of the (old) ISBA scheme. Claude explains that, technically, Partners should not see the changes but they will progressively have the possibility to create and test LBC files produced from ARPEGE+SURFEX: LACE, Belgium and Poland have already asked to test; if other Partners want to test, they should let Mariska and Claude know. Later, Partners will also have the opportunity to prepare coupling files with the ARPEGE e-suite files

Later, Partners will also have the opportunity to prepare coupling files with the ARPEGE e-suite files (that will contain not only ARPEGE+SURFEX changes but also other modifications).

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Maria asks if Mariska will organize some working days to prepare this switch to SURFEX (as it was done during the LBC WW in Toulouse in 2015). As technically, Partners should not notice any change, there is no need for such an action.

Hassan wonders if it is better to test first the ARPEGE+SURFEX impact, then the impact of the full esuite. Piet explains that Belgium and Czech Partners will assess for ALARO (that runs with ISBA) that there is no technical impact of the ARPEGE+SURFEX changes, thus there is probably no need for the other Partners to run intermediate tests and they may wait for the full e-suite files.

Alena asks for a technical documentation on how the conversion is performed and how the new surface fields are created (to obtain LBC files technically equivalent to the former LBC files created by ISBA). Claude will discuss with Françoise and François and propose a documentation. He also commented that the same conversion method is already used in Arpège for 4DVAR (that does not use SURFEX).

## 4. Code & Cycles

## 4.1. Status of CY40T1 export installation @Partners

Mariska summarizes the status of the installation of CY40T1 at Partners institutes (see <a href="https://docs.google.com/spreadsheets/d/1\_lQMFDaRRDNEng21asHKQ42Hx\_-llOnRG3EX3BtfzVo/">https://docs.google.com/spreadsheets/d/1\_lQMFDaRRDNEng21asHKQ42Hx\_-llOnRG3EX3BtfzVo/</a>): the inquiry shows that most porting problems have been solved and no blocking points are still reported. However, Hungary and Romania are still facing problems in 3DVAR implementations. Those were not specified further neither reported to ACNA.

All LTMs (but Czech and Portugal who haven't tried to install this version as they are waiting for their new computer) agree that the CY40T1 version will be operational in their NMS at the beginning of 2017.

Daniel informs that CY38H1.2 was declared by HIRLAM at the end of September. Cy40 is not yet operational in the HIRLAM NMSs. The HIRLAM RCRs have however been validated for the CY40H1 version that should be implemented locally soon.

# *4.2. CY40T1 - potential bf06*

A GIT-branch containing all proposed bugfixes on top of the first export version of CY40T1 was tested by Olda on prolix, in the mitraillette environment (<a href="https://docs.google.com/document/d/1Y3rjAlo8d-u\_Njl4dHNky8iAScBny9ywp6WjDYvkpM8/">https://docs.google.com/document/d/1Y3rjAlo8d-u\_Njl4dHNky8iAScBny9ywp6WjDYvkpM8/</a>). Some changes for ALARO-1vB could be added to this GIT-branch (they were already accepted for CY43T2, thus they could probably enter the package of bugfixes for CY40T1 without problem). Mariska will come back to Radmila to get information on the calendar of the introduction of these ALARO improvements in the GIT-branch; a "\_bf06" of CY40T1 could be prepared when this GIT-branch is successfully tested and become the upgraded (second) version of the export of CY40T1.

#### 4.3. Usual MF report on codes/cycles/suites

Claude opens the floor for comments or questions on the "progress and plans on the cycles and MF esuites" document he sent before the meeting (Doc 4.c ProgressPlansMF).

Alena asks how OOPS affects the OBS operators. Claude answers that, if some side-effects of the CY43 re-factoring break APACHE, some quick – possibly dirty – fixes will be implemented to keep the APACHE code running. The same applies for ACHMT. Alena stressed that ALARO is using its own PBL operator inside HOP (ACTKECLS) and thus it should also be taken into account when completing the re-factoring for MF/Aladin specific options. Claude took a note on this comment.

#### 5. Feedback from Strategy meeting and PAC

A preparatory document (Doc 5 PMreportMeetings) was sent to the LTMs: it gathers materials prepared by Piet for PAC. This whole document is not to be discussed during this LTM meeting but questions or remarks are welcome, directly to Piet, in Rome during the coffee breaks or later on by email.

Piet asks the LTMs to read the <u>PAC document 4.2 (Strategy)</u>: this document clarifies what we mean about system, configurations, etc ..... Piet proposes to also use in the rolling work plan the categories of activities defined in the strategy document, such as common activities (ie ACNA, phasings, ...), core programs (data assimilation, scalability, ...) and leave to the relevant groups the writing of specific plans (ex OPLace, ...).

Martina raises two concerns on reading the document: in the HARMONIE data base at ECMWF, all Croatian data are blacklisted, thus the use of HARMONIE tool for DA will mean no Croatian data in ALARO-Hr assimilation, and the HARMONIE verification of ALARO-HR will mainly concentrate over Switzerland; Martina also notices that the Slovenian tool to couple with an ocean model doesn't appear in the plans. Perhaps it might be embedded in SURFEX but then it means interested Partners will be obliged to run SURFEX.

Piet thanks Martina for her reading and her questions. Piet asks all the LTMs to send him their remarks and questions on the strategy document for further analysis. He also proposes to write the common rolling work plan with HIRLAM around Claude's preparatory document (see 4.3) for the common activities. Additionally there will be two plans for the core programs in dynamics and on data assimilation. Specific, pioneering activities will be organized by the concerned groups, e.g. LAEF should be a LACE plan.

Piet explains the genesis and the purpose of the <u>ALADIN system paper</u>. The writing procedure was defined by PAC. This paper will be proposed to GMD and settles the history for the future. A first draft will be distributed to the LTMs (and LACE PM) in the coming weeks. Additional papers (on ALADIN-HIRLAM system, on the validation of a cycle, the installation of SURFEX in ALARO, ALARO climate, etc ....) could be written afterwards.

Yong comments that LACE is also preparing a paper about LACE, to be proposed to BAMS next January.

The last General Assembly political issues on <u>the ALADIN flyers</u> are now solved. The LTMs have received and agreed on the current proposed drafts (a general and common part on the first page and a second page written rather for modelers and that can be personalized with a local example from each NMS). <u>The LTMs who want their local example on their flyers are asked to send it urgently to Piet</u>. The flyers will be printed before the next General Assembly.

Piet reports on the ongoing discussions with HIRLAM about the terminology and asks the LTMs to take care of the terminology and refer to the ALADIN System: this is a "brand" (as the ALADIN system paper and the flyer will assess it).

Neva proposes to use ALADIN during EWGLAM discussions and not a mix of ALARO/ALADIN/AROME.

Daniel comments that it is the same for HIRLAM, HARMONIE brand is well-known but some presentations during EWGLAM are on AROME.

The question on which name to use for the presentations/discussions during EWGLAM annual meetings will be raised at the next PAC meeting.

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<u>DA starters kit</u>: Roger once proposed the ALADIN partners without DA to kick off using the HARMONIE scripting system; also, some ALADIN Partners have benefited from the LACE experience (i.e. Tunisia who agreed to access the OPLACE data under OPLACE conditions). Piet raises the question of the opportunity to start working with the HARMONIE system or to try to benefit from ALADIN/LACE and OPLACE experience. This should be discussed with LACE PM officially, as it directly concerns RC LACE activities. Piet considers to organize a Working Week dedicated to DA starters kit program.

# 6. Feedback from other meetings (ALARO WD, 27th LSC)

## 6.1. NH namelist recommended settings

This point was not discussed as we were running short of time. The main recommendation is to read Petra's note.

## 6.2. Simple 3dvar scripts installed on MF computers

For those needing a set of basic scripts to start some 3DVar from scratch and want to run some technical tests, useful information is available on the LACE forum: see <u>Screening in general</u> and <u>Minimization procedure</u> and the scripts are available on beaufix and hendrix, as stated on the LACE forum.

6.3. Request for new export version CY43xx (ALARO-1vB, DDH, SURFEXv8, grib2 in FA)

Partners are interested in a future export version on CY43 in order to benefit from some scientific developments with respect to CY40T1, but also from some technical steps for OOPS that would be in CY43 and that would affect their local HPC. Claude confirms that an export version of CY43T1 or CY43T2 is targeted although he cannot give a specific time-line, as such a version should first be fully validated on an AROME 3D-Var (the validation hasn't begun yet).

6.4. Request for SURFEX training course? (link with NWP, newcomers)

This point was not discussed as we were running short of time.

#### **7. AOB**

#### 7.1. Information for Toulouse visitors

There was some renovation in the Toulouse residences. The good thing is the rooms are better! The counterpart is only one residence was renovated and can host non-Météo-France visitors (only the person invited in Météo-France can be host, not their relatives). Thus, it could be rather tricky to obtain a room, depending on the dates of the visit. So far, we've got all the rooms we asked for, but at a price of consequent energy spent by people not only in GMAP but at the level of the Head of Research sometimes!

It is important to plan the visits in advance (also important for availability of your mentors, your office, the funding, ...) and to tell us in advance if you wish a (single) room, with indicating your exact dates of arrival/departure (a room may not be available on week-end, if checked out on Saturday for instance,

and the cleaning won't be done before Monday). It is also important to tell us if you've changed your mind and won't use the room, or will only stay there during a few days when we booked it for a whole month: it happened recently and it doesn't help us to justify that we need these rooms for the visitors if some visitors don't show up or leave much sooner than they requested. It's not a problem if some visitors rather don't stay in the residences but we should know about it.

# 7.2. Call for GA slides & next NL (Tour d'ALADIN)

The LTMs are asked to think about what is important with respect to the ALADIN activities in their NMS in 2016, to be shown to the Directors in Piet's Tour d'Aladin at the next ALADIN GA (8 of December in Darmstadt) and to be published in the next Newsletter (due in January 2017). LTMs should prepare:

- before November 28, 2016: one slide to be shown by Piet during the next GA; Patricia will prepare and distribute a template. [the template is available on googledocs; please download the .ppt or the .odp file, fill the slide for your NMS and send back to Patricia a file with only your slide].
- before December 15, 2016: one article for the "tour d'ALADIN-HIRLAM" in the 8<sup>th</sup> ALADIN-HIRLAM Newsletter (Patricia insists on everybody using the templates proposed on the ALADIN webpage for NL8: <a href="http://www.cnrm.meteo.fr/aladin/spip.php?article260">http://www.cnrm.meteo.fr/aladin/spip.php?article260</a> as she faced some technical problems with NL7 (specially with Latex contributions when different templates were used).

# 7.3. prolix->beaufix

This point was not discussed as we were running short of time. All information is in the last email from Eric Escalière. The LTMs should contact him in case they have further questions.

#### 7.4. Additional point on e901

Balazs asks if Météo-France plans to make the e901 configuration able to produce LBC files from data produced on an octahedral grid (thus from ECMWF files). Claude answers that this won't be done at the level of the e901 configuration, but the transformation will be provided by MARS (this facility will be maintained by ECMWF).

## 8. Closing

The next meeting will take place in Helsinki, besides the <u>Joint 27th ALADIN Workshop & HIRLAM All Staff Meeting 2017, 3-7 April 2017, Helsinki, Finland</u>.

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# **Annex : Agenda with list of preparatory documents**

Agenda		Introduced by	Decision, comments, information	Documents
1.	Opening and welcome	ACNA		
2.	Adoption of the agenda	ACNA		Doc 2 (Agenda)
3.	ARPEGE with SURFEX => impact on LBC	CF/ACNA	information/ discussion	Doc 3 (LBCfrom ARPEGE- Surfex)
4.	Code & Cycles			
4.a	Status of CY40tT1_export installation @Partners	ACNA	Information/ discussion	link2ACNA table
4.b	CY40T1 - potential bf06	ACNA	Information/ discussion	link2ACNAdoc_bf06
4.c	Usual MF report on codes/cycles/suites	CF	information	Doc 4.c (ProgressPlansMF)
5.	Feedback from Strategy meeting and PAC	PT	information	Doc 5 (PMreportMeetings) <sup>1</sup>
6.	Feedback from other meetings (ALARO WD, 27th LSC)	ACNA		
6.a	NH namelist recommended settings	ACNA (PS)	information	Doc 6.a by P. Smolikova
6.b	Simple 3dvar scripts installed on MF computers	ACNA (AT)	information	screening minimization
6.c	Request for new export version CY43xx (ALARO-1vB, DDH, SURFEXv8, grib2 in FA)	ACNA	discussion	
6.d	Request for SURFEX training course? (link with NWP, newcomers)	ACNA	discussion	
7.	AOB	ACNA		
7,a	Information for Toulouse visitors	PP	information	
7.b	Call for GA slides & next NL (Tour d'ALADIN)	PP	Action!	Newsletters' page
7.c	prolix->beaufix	CF	information	
8.	Closing			

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<sup>1</sup> Some documents from PAC are provided for additional information (PAC4.2, PAC4.2) together with some draft proposals for the flyer