



ALADIN LTM meeting
Monday 16 April 2018
16:30-18:45
Toulouse, France

Minutes

Participants

ALADIN Program Manager : Piet Termonia

Representatives :

Algeria : **Mohamed Mokhtari** (LTM)

Austria : **Christoph Wittman** (LTM)

Belgium : **Alex Deckmyn** (LTM)

Bulgaria : **Boryana Tsenova** (dep. LTM)

Croatia : **Antonio Stanesic** (dep. LTM)

Czech Rep : **Radmila Brozkova** (LTM)

France : **Claude Fischer** (LTM)

Hungary : **Mihaly Szucs** (LTM)

Morocco : **Fatima Hdidou** (dep. LTM)

Poland : **Marcin Kolonko** (dep. LTM)

Portugal : **Maria Monteiro** (LTM)

Romania : **Alina Dumitru** (dep. LTM)

Slovakia : **Jozef Vivoda** (LTM),

Slovenia : **Neva Pristov** (LTM)

Tunisia : **Wafa Khalfaoui** (LTM)

Turkey : **Alper Guser** (LTM)

LACE Program Manager : Martina Tudor

ACNA: Maria Derkova (Mariska)

HIRLAM observer : Daniel Santos

Support Team : Patricia Pottier

MF observers : François Bouyssel, Ryad El Khatib

LACE ASC : Oldrich Spaniel

1. Opening and welcome

Mariska opens the meeting and welcomes the participants. All ALADIN partners are represented, plus a few observers (the LACE PM, the LACE ASC, HIRLAM system AL, MF observers).

2. Adoption of the agenda

The agenda is adopted without modification ([see Annex 1](#)).

3. Report on governance issues

Piet comes back on his opening presentation during this Workshop, explains in details the convergence roadmap and opens the floor for questions.

Radmila raises the question of the existence of ALADIN as a (sub-)consortium (with its MoU) when the single ALADIN-HIRLAM consortium is created. Will the LTM still exist with similar ToR ?

The discussion has just started on the governance and it will be the main topic on the next HAC/PAC meeting. The LTMs will be communicated the outcome of the HAC/PAC recommendations (a document will be produced for the ALADIN General Assembly and HIRLAM Council who have tasked the PMs and the HAC/PAC to propose a scope and a governance for the future single consortium) and this point will be put on the next LTM meeting agenda.

Questions are also raised on the Rolling Work Plan (RWP) content and form, on the involvement of the LTMs in its preparation and on the contributions of the local teams in the common T-codes. At their next meeting (next Friday), the HIRLAM MG and ALADIN CSSI will discuss the RWP organisation (timetable for establishing the 2019 RWP, redaction guidelines, Work Packages content, ...). The LTMs will be kept informed (minutes of HMG/CSSI meeting) and asked for feedback.

4. Code and cycles

4.a. 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 e-suites” document he sent before the meeting (Doc 4.a). This document (and the previous ones) can be found on the article with the history of the cycles that is available on the aladin website (main modifications, phasing teams) : <http://www.umr-cnrm.fr/aladin/spip.php?article64>.

Claude also reminds the LTMs that information (minutes) on the coordination meetings and technical meetings with ECMWF, and the technical memoranda (so-called FLUBs) of the common cycles or T-cycles are available on the “Partners” part of the ALADIN website to which all ALADIN/HIRLAM partners have access to (password protected).

Claude asks the LTMs to express his thanks and appreciation to the members of their teams who participated to the recent phasing exercises in Toulouse, and to consider checking with their team for possible volunteers for the next phasings.

As Claude announces that the ARPEGE high-resolution e-suite is planned for June (see François’ presentation at the workshop for details), Mariska asks if a specific action to upgrade the LBC coupling files is needed, as it was done at the last increase of ARPEGE resolution.

It is decided that Mariska will start the survey of the Partners wishes for LBC changes and Claude will consult the MF operational team for possible time window for the testing and the switch.

Radmila raises the question of the future of e923 in the context of most partners moving to SURFEX. The concept behind the e923 was to have this tool inside the system, thus fully compatible with the models. The e923 question is still to be investigated (Mariska, François, Claude).

4.b. The export version

Claude explains that the last export version is based on CY40T1 and is very stable now. CY43T2 is the first cycle with significant OOPS re-factoring, which partly explains the long validation process. CY43T2 is probably the basis for the next e-suite at MF. Claude proposes to issue an export version based on CY43T2 only when the CMCs AROME & ALARO and AROME-FRANCE 3DVAR configurations are validated, in order to avoid many updates of the bugfixes.

So far, a version of the CY43T2_bf04 has been made available for the Partners who asked for (HIRLAM for HARMONIE-AROME, Belgium and Czech for ALARO) and GMAP colleagues are still working on some issues.

It is asked that every Partner who starts testing CY43T2 sends information both to Claude and to Mariska. The status of the CY43T2 validation will be discussed at the next ACNA WebEx, with the aim of not waiting too much before declaring it and producing the export version.

The bug reported on Bmatrix computation with festat in CY40t1 by CHMI team has been discussed. A fix is available from CHMI and can be exported as a bugfix. It is advised to compute Bmatrix with CY43T2 (festat is standalone package).

5. CANARI usage (questionnaire)

Mariska made an inquiry on how CANARI code is used for any applications (it's still time to contribute and answer in the drive table :

https://docs.google.com/spreadsheets/d/1_IQMFDaRRDNEng21asHKQ42Hx_-lIOnRG3EX3BtfzVol.

Claude explains the context : the CANARI code, which is using some of the IFS observation screening code, plus additional codes for specific QC and Optimal Interpolation (OI) computations, is undergoing heavy re-coding in order to remain functional within the main OOPS re-factoring cycles [CY43-CY46]. Some CANARI options have been tested by MF. Other options were not tested in ARPEGE or AROME-France, but are probably not too difficult to evaluate (maintain). Some options or facilities were not tested, or are not working in CY43 (see Annex 2). For the latter (i.e. 3D observations and "veral/diagpack" mode), Radmila comments that other codes than CANARI should be developed/used (screening for upper air, other verification package).

6. Discussion about model outputs and diagnostic fields

Mariska has revitalized the discussion on the diagnostics parameters in and outside the ALADIN system. There is an increasing need for new diagnostics parameters out of NWP systems for many applications such as aeronautics, green energy sector, automatic forecasting and for various end-users. Such work is ongoing at every NMS. To avoid possible work duplication it is suggested to - at least partially - coordinate activities on the diagnostics developments. She prepared a summary of available diagnostics, either in fullpos, gl or in the external tools (deterministic fields only):

https://docs.google.com/spreadsheets/d/1x-9JKW6OpgPDpoMAutzKfSPgOhx2_isAYD_IbOoqHBA/

Mariska thanks those who already put information in the shared file and encourages the others to add their input there. The LTMs interested in having some centralized tools are encouraged to fill the table and to participate to the system Working Group discussions.

7. DA coordinator activities

Maria presents a brief note on her first activities as DA coordinator. She summarizes the outcomes of the inquiry she launched on status of DA.

<https://docs.google.com/spreadsheets/d/1REEm5USxpE7gOrjzSZTDul3ieCKPVzvvHq1rf22vmA/>

All countries have available data to be assimilated in their local DA systems.

- Know-how to process conventional data using ALADIN system already exists in all countries.
- Some countries already setup a DA cycling and there is a trend/common wish to invest on surface DA in this moment.
- Data Monitoring and validation tools know-how are missing.
- Some questions are risen by this inquiry :
- Is it opportune to think now in one single Data Monitoring tool, since HIRLAM plans to upgrade obsmon and LACE has somehow frozen its DM tool ?

- Can SAPP (ECMWF) become a common observations (...) monitoring tool, if support for local operations will be provided (since more and more countries are testing it), at which distance?
- Which verification tool to adopt for local validation DA systems ?
- A short-term actions, Maria proposes :
- to establish regular video-conferences with DAsKIT countries,
- to organise DAsKIT Working Days, possibly in Lisbon during the week 17-21 September 2018. The content of the WD is still opened (overview of the progress of the countries, more focussed sessions on the topic of common needs : DA cycling, surface DA, overview with exercises if possible, some validation & verification tools, ...). Alternatively, there is also a possibility to organise these WD besides the LACE DA WD in Romania.

Piet adds that, besides these 8 countries, if others are interested, this is still time to join the DAsKIT team.

8. Support team information

8.a. Some changes in manpower registration

A their 3rd joint meeting in Krakow (Nov. 2017), the ALADIN General Assembly and the HIRLAM Council tasked the PMs and Patricia to propose a joint manpower reporting to monitor the invested manpower in ALADIN-HIRLAM common work.

A new tool was thus developed for manpower reporting : <http://www.umr-cnrm.fr/aladin/meshtml/AHMP/index.html> (no need to connect as a Partners first).

Each NMS (the ALADIN-LTM and the HIRLAM-HoR) have a login access with the possibility to change their password, the full consultation of the data about their NMS people/work, the consultation of a few statistics, the management of their NMS people and the possibility to register the work of their NMS people.

The PM access logins don't give the possibility to register work or to manage people but they can consult the data about the people/work in their consortium (ALADIN, HIRLAM, LACE) and have access to some statistics.

It won't be that different from the current tool used in ALADIN. Main changes from the current ALADIN manpower tool : the same form is used for home work and stay; there is no longer an "in-kind" criteria and the criteria added 5 years ago (parallelization code design,) is also abandoned; a reference to the Work Package in the current RWP as been added. The biggest difference is that the LTMs register the work of their people wherever it is done (formerly called "stays" are non longer registered by the LTM who host the stay).

Patricia has converted all former registered actions into the new database and the LTMs have access to the past data (since 1991).

It is decided to use this new tool from now on and the first quarter of 2018 should be registered with it.

Patricia will organise some videos meetings to demonstrate this new tool and to answer LTMs questions : please connect to https://rendez-vous.renater.fr/aladin-hirlam_manpower either on April Wednesday 25th 10:30-11:30, or on Thursday 26th 10:30-11:30 or 14:00-15:00, or on Wednesday 2 and Thursday 3 May 14:00-15:00. The LTMs may want to read the documentation before the video meetings (<http://www.umr-cnrm.fr/aladin/meshtml/AHMP/help.pdf>).

8.b. About MF residence in Toulouse

There is a new rule concerning Toulouse MF residence : arrival and departure are now only possible on working days (if somebody wants to travel during week-end or bank holidays, they have to be prepared to book a room in a nearby hotel). Information on bank holidays can be found on the aladin webpage : <http://www.umr-cnrm.fr/aladin/spip.php?article161> .

8.c. ALADIN Templates

A template is proposed for the ALADIN presentations. It was first used at the 21st ALADIN GA. The last version was prepared in April 2018 when Algeria NMS changed their logo. In order to keep it update, the Local Team Managers should make sure to let Patricia know about any changes in the name or logo of their institute. The template is available on the aladin webpage on different formats : <http://www.umr-cnrm.fr/aladin/spip.php?article315> .

8.d. Newsletter : call for contributions

The next newsletter will be mainly dedicated to this Wk/ASM in Toulouse. It is due for this summer. Thus, the LTMs are kindly asked to make sure the colleagues form their team prepare a short article based on their presentation (or poster).

Deadline is 15th of July and the authors are asked to use the templates as they are proposed on-line : <http://www.umr-cnrm.fr/aladin/IMG/gz/templates-nl8.tar.gz> .

9. Closing

The next meeting will take place in Salzburg, besides the EWGLMA/SRNWP, probably on Tuesday 2nd of October 2018.

Annex 1 : Agenda with list of preparatory documents

	Agenda	Intro d. by	Decision, comments, information	Documents
1.	Opening and welcome	ACN A		
2.	Adoption of the agenda	ACN A		Agenda
3.	Report on governance issues	PT	information	
4.	Code & Cycles			
4.a	Usual MF report on codes/cycles/suites	CF	information	Doc4.a
4.b	The export version	CF	information	Doc4.b
5.	CANARI usage (questionnaire)	MD	information	https://docs.google.com/spreadsheets/d/1IQMFDaRRDNEng21asHKQ42Hx_-lIOnRG3EX3BtfzVo/
6.	Discussion about model outputs and diagnostic fields	MD	discussion	https://docs.google.com/spreadsheets/d/1x-9JKW6QpgPDpoMAutzKfSPgOhx2_isAYD_IbOoqHBA/
7.	DA coordinator activities	MM	information	https://docs.google.com/spreadsheets/d/1RE Esm5USxpE7gQrjzSZTDul3ieCKPVzvVHq1rf22vmA/

8.	Support team information			
8.a	Some changes in manpower registration : http://www.umr-cnrm.fr/aladin/meshtml/AHMP/index.html	PP	information	http://www.umr-cnrm.fr/aladin/meshtml/AHMP/help.pdf
8.b	Some changes in MF residences	PP	information	http://www.umr-cnrm.fr/aladin/spip.php?article161
8.c	ALADIN templates	PP	information	http://www.umr-cnrm.fr/aladin/spip.php?article315
8.d	Newsletter : call for contributions	PP	information	http://www.umr-cnrm.fr/aladin/spip.php?article260
9.	AOB (if any) and closing			

Annex 2 : CANARI validation (CY43 and later cycles)

Context: the CANARI code, which is using some of the IFS observation screening code, plus additional codes for specific QC and Optimal Interpolation (OI) computations, is undergoing heavy re-coding in order to remain functional within the main OOPS re-factoring cycles [CY43-CY46]. For instance, it has taken several weeks of efforts in order to adapt the CANARI in-core memory handling of observations in CY43. Other specific re-coding steps might be necessary until CY46.

As a sad additional event, the Aladin consortium has lost its major CANARI code expert tragically in 2017.

Brief about CANARI options tested by MF, or evaluation of level of complexity of maintenance in CY43 (focus is on options described in the CANARI inquiry for the LTM meeting of 16.04.2018; refer to Table by ACNA):

1. options tested in Arpège and Arome-France CY43T2 assimilations by MF:
 - 1.1. LAEICS=.F. , LAECHK=.F. , LAET2M=.T. , LAEH2M=.T. , LAEV1M=.F. , LAEPDS=.F.
 - 1.2. since Surfex is now operational in both Arpège and Arome-France, the calling sequence for projecting increments of T2m and RH2m on (Ts, Ws) is now under OI_MAIN (oi_cacsts.F90 etc.) instead of the non-Surfex (“ISBA-only”) calling tree using cacsts.F90. MF intend to focus on the OI_MAIN version only for testing and development, but would ensure not to break the other call-tree or liaise with the partners when needed.
2. options not tested in Arpège or Arome-France, but probably not too difficult to evaluate (maintain):
 - 2.1. LAEICS=.T. , LAECHK=.T. (note: CANARI-specific QC for 2m observations => could use screening instead ?), LAEV1M=.T. , LAEPDS=.T.
 - 2.2. the “ISBA-only” call tree for CACSTS (projection of increments in non-Surfex case)
3. options or facilities that were not tested, or that are not working in CY43. All are likely to require significant work:
 - 3.1. handling of any other observation than screen-level (eg. RS) in analysis OI code and obs dataflow (not tested)
 - 3.2. LVERAL option (verification package) (not tested)
 - 3.3. handling of observations located near to, but out of the bounds of, the C+I domain (broken)