26th ALADIN LTM meeting
Monday 1 April 2019
16:15-18:15
Madrid, Spain

Draft Minutes

Participants

ALADIN Program Manager : **Piet Termonia**

Representatives :

Algeria : **Mohamed Mokhtari** (LTM)
Austria : **Clemens Wastl** (dep. LTM)
Belgium : **Alex Deckmyn** (LTM)
Bulgaria : **Boryana Tsenova** (LTM)
Croatia : **Antonio Stanesic** (dep. LTM)
Czech Rep : **Radmila Brozkova** (LTM)
France : **Claude Fischer** (LTM), Ryad El Khatib
Hungary : **Mihaly Szucs** (LTM)
Morocco :
Poland : **Bogdan Bochenek** (dep. LTM)
Portugal : **Manuel Lopes** (dep. LTM)
Romania : **Alexandra Craciun** (dep. LTM)
Slovakia : **Jozef Vivoda** (LTM),
Slovenia : **Neva Pristov** (LTM)
Tunisia : **Wafa Khalfaoui** (LTM)
Turkey : **Alper Guser** (LTM)

ACNA: **Maria Derkova** (Mariska)
Code Architect : **Daan Degrauwe**
HIRLAM observer : **Daniel Santos**
LACE PM : **Martina Tudor**
Support Team: **Patricia Pottier**

1. Opening and welcome

Mariska opens the meeting and welcomes the participants. All ALADIN partners but Morocco are represented. The DA coordinator (Maria Monteiro) cannot attend but has provided a report.

2. Adoption of the agenda

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

3. Code and cycles

3.a. Usual MF report on codes/cycles/suites

Claude quickly summarises the "progress and plans on the cycles and MF e-suites" document he sent before the meeting (Doc 3.a). This document (and the previous versions) 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.

- Operations in MF:
  - CY43T2 ARPEGE high resolution E-suite foreseen to switch to operations in beginning of June 2019: it is a fairly long e-suite due to small bugs in grib2 and to new products output being asked by MF operations with a high priority;
  - MF hopes to be able to start another e-suite based on CY46T1 (this is pending on timeliness of the switch of CY43T2 and precise calendar of arrival of next HPC) in autumn 2019 with expected operational exploitation in Q1 2020;
  - in 2020: installation of next HPC in MF (still with an uncertainty of about 6 months on the precise calendar); decision to become official in July 2019.
- Cycles:
  - CY46T1 was declared end of February 2019 ; it includes many known and updated fixes enabling to run ARPEGE and LAM data assimilation systems [phasing up from

CY43T2 – including the revival of CANARI] + updates for ARPEGE-SURFEX_v8 + any other fixes collected within [CY43-CY46].; some additional new science was added too;
- CY47 is now in build process with EC;
- perhaps only a fairly “quick” CY47T1 in the autumn;
- two scenarios for CY48: early (start build in Dec’19) or later (start build around Feb’20) => we think that we need to be prepared for the early scenario.

Radmila asks if the Partners will have the possibility to test coupling files from ARPEGE HR. Claude answers that MF will produce test files for Lace and Belgium domains as soon as possible.

Claude asks all LTMs and representatives to check within their team for potential volunteers for the upcoming phasing exercises in Toulouse : CY47T1 (Oct.-Nov. 2019) and CY48 (Dec. 2019 and first quarter of 2020).

3.b. CY43T2_bf.10

An incremental update of the source code for the CY43T2 ALADIN export version is available since 27 February 2019 (bf.10). This version has been tested against the usual "mitraillette" tests and contains a set of fixes from various contributors (Ryad, Alaro, ….) collected by Olda Spaniel. See http://www.umr-cnrm.fr/aladin/spip.php?article334 for more details (information on export versions are available on the “Partners only” part of the ALADIN website).
Mariska adds that there are 2 more small fixes (PGD and ECHKEVO routines) provided by Belgian team that won’t be in a new bugfix but will be announced by email.
Radmila asks if the new precipitation products developed by MF will be available in the code for Partners. Claude proposes to make available the branch of op1 that contains these products and their documentation to interested Partners (so far Mariska, Neva and CHMI team). Radmila could prepare a patch from this branch as they did for other MF products (i.e. reduced visibility) that are already running operationally at CHMI and are under evaluation by Czech forecasters.

3.c. Porting of CY43T2 export version by Partners

Both CY43T2_bf.09 and bf10 have been used as base versions for ALADIN export versions. Mariska summarises the status of the installation of CY43T2 at Partners, without distinction between bf.9 and bf.10. Details can be found on the shared document :
https://docs.google.com/spreadsheets/d/1_lQMFDaRRDNEng21asHKQ42Hx_-llOnRG3EX3BtfzVo/edit#gid=2011676472
There is good progress since the last LTM meeting.
Daniel explains that HIRLAM is starting to use CY43T2 locally (having it in the e-suite in MetCoop) and has plans to release CY43H2 after summer, after adding contributions on top of CY43T2. HIRLAM will continue to work on this cycle in order to have also 4DVar running operationally on CY43. Claude and Daniel still have to assess the possibility for these HIRLAM developments to enter the main repository, mainly to ensure its validation (perhaps using new tools to test DA codes?).

4. Possible update of LBC files from ARPEGE

For Partners coupling with ARPEGE and who want to benefit from the increase of ARPEGE resolution to upgrade their LBC data or who need any other update of their LBC data, there will be a possibility for a coordinated change. Mariska has gathered Partners wishes (including additional LBC data for assimilation in DAsKIT countries). The estimation of the impact on the LBC files size is being evaluated by MF Operation & IT department. They have asked those with big increase of volume to check that this increase can be digested within their data transfer channel.
For Tunisia, Wafa confirms that their IT team is working on an increase of the bandwidth for the end of 2019. As a temporary solution, she suggested that Tunisia might only transfer 5 hourly LBC files, even if 1 hourly files would already be produced in MF, as long as the bandwidth increase is not in place.

MF will implement 1 hour coupling for those countries who have asked for 1 hour frequency LBC files.
MF will also provide LBC files from ARPEGE assimilation runs when requested. However, Claude wonders if LBCs from 'assim' are really beneficial for coupling local LAM DA suites (AROME-France is not coupled with ARPEGE assimilation files but with ARPEGE production data due to timing constraints). Radmila explains that they need these 'assim' LBC for consistency in BlendVar.
Some partners asked for LBC files until 72 hour range for 18:00 UTC run : this won't be possible as ARPEGE stops at 60 hours at 18:00 and MF has no plan to extend this range.

The time window for implementing these LBC changes is the second half of October or the beginning of November (the exact period will be announced).

4.a. E923 configuration

MF has tools (E923 under OLIVE system) to create the PGD and CLIM files. During her visit in Toulouse, Suzana (from Croatia) updated the old scripts and worked on a first set of modernization. Unix-based scripted have been renovated (inspired by the OLIVE configurations in MF) to allow Partners to run them on Beaufix from distance. Florian Suzat (new contact person in GMAP) works on a new management of the scripts, their input resources and their output data, offering more historical trace-back, and more collaborative share of information and maintenance. This new tool (named CLIMAKE) is now being tested by ALADIN teams (ACNA, Croatia). It will be available on GIT environment, with namelists and readme documentation.
Radmila asks about the compatibility of the sub-grid orographic fields - these are currently computed from global databases in 923 (thus smoothed) whole local databases are used in PGD. Claude answers that the plan for ARPEGE and AROME (if needed) is to read sub-grid orography fields from PGD - the solution that is already adopted for orography and land-sea mask.
Mariska asks Daniel how HIRLAM is coping with the problem of local high resolution databases that are inconsistent with those used in E923, and how to ensure that once locally corrected, other users get the information. Daniel answers that they are thinking about a methodology to identify such problems in general. The correction of databases shall be addressed on the level of EUMETNET programs.

5. Surfex code contributions by ALADIN Partners

Daan pointed the situation : SURFEX and IFS/ARPEGE/ALADIN/HIRLAM each have their own version calendar and 2 "trunks" of SURFEX exist next to each other : the "master" GMME trunk, maintained by the SURFEX team, and a "NWP" trunk, i.e. what's inside the ALADIN/HIRLAM cycles. Until now, non-MF ALADIN contributions to SURFEX were relatively sparse, but with the adoption of SURFEX in the ALARO CMC this may change.
One way to keep consistency between these 2 trunks is by means of "double" commits: first commit to the phasing of a T-cycle, then commit to the phasing of a new SURFEX version; this second step will be coordinated (for non-MF) by the ALADIN Code Architect.
This double commit procedure seems laborious. But this is how GMAP does it already and this procedure was successful when introducing TOUCANS stability functions in SURFEX.
Adopting SURFEX in all Canonical Model Configurations (mitraillette tests for ALARO and AROME) must come along with the guarantee that new SURFEX versions won't break these configurations.
In summary, if you made developments on SURFEX, you need to port them on the NWP branch, then contact Daan who will port them to the next SURFEX branch.

6. DA coordinator activities

As Maria cannot be there, Piet takes the floor to present her report. Documents around the DAsKIT core program are available on the ALADIN website (see the DA coord weDA coord wepages).
After Bucarest meeting, all DAsKIT countries know how to set up a DA cycling with conventional

data and all countries have data monitoring tools available locally; validation tools are still missing in most of the countries.
There are now 'communication platforms' between the DAsKIT partners (web & forum; annual DAsKIT Working Days; regular video-conferences). Last year, it proved interesting to organise the DAsKIT meeting with the LACE DA WD and it was decided that the next meetings will be both in Prague, with increased exchange.
The Common ALADIN-HIRLAM DA Training Course (February 2019 in Budapest) was a great opportunity to learn on actual available DA tools, though not all the DAsKIT countries could be present. Radmila commented that this training course was rather costly from LACE point of view (as LACE provided many teachers that devoted substantial manpower to prepare the training). Martina added that quite some time was needed to prepare the environment at ECMWF for non-members and many difficulties had to be faced.
Piet acknowledged the effort from LACE people who devoted time to the preparation, lectures, and exercises. There is no firm plans to organise similar training course soon. May be, it can be organized easily/better, may be at MF ?

7. Support team information

Next Newsletter : The LTMs are asked to make sure that the colleagues from their team who gave a presentation (or presented a poster) at this Wk/ASM in Madrid prepare a short article to be published in the next Newsletter. **Deadline is July 24, 2019** :
(see http://www.cnrm.meteo.fr/aladin/spip.php?article260 for the NL templates).

Visitors in Toulouse (funding by Meteo-France or by flat-rate money managed by Meteo-France) : the per-diem and the travel are still paid through Campus France but Campus decided to do so via Travelex payments from now on. All visitors should make sure (if not, please contact Patricia or Lydie Romet) that they receive a email from Campus France before travelling; with this email and their passport, they will be able to get the money upon arrival at the airport.

Manpower reporting and Rolling Work Plans : Patricia underlines that all LTMs did a good job in using the new manpower reporting tool and filling their numbers mostly on-time for 2018. She opens the floor for further questions on the registration tool, with respect to what had been already explained at the 25th LTM meeting in Salzburg. She shows some statistics over 2018 (the first whole year of common reporting with HIRLAM).
Even if the tool allows a three month period to register a given semester after it ends, Patricia kindly asks the LTMs to register earlier, in order to be able to present updated statistics at meetings such as LTM, HMG/CSSI, HAC/PAC, GA/C … The LTMs can already report the first quarter of 2019. It will be the first step in the RWP2019 assessment.
The HMG/CSSI is already working on the RWP2020 and, although the HMG/CSSI meeting still has to discuss/approve the timeline for preparing it, Patricia can already tell the LTM about upcoming tasks on them: before summer, they will be sent a draft RWP2020 to check for possible missing items in the Work Packages; after summer, when the RWP2020 text is ready, they will be asked to commit the manpower for their team. More details on the deadline and the procedure will be given in the minutes of the next HMG/CSSI meeting, but we don't expect many changes with respect to the RWP2019 preparation.

8. Code/model WD Tls announcement

On 9-12 September 2019 (with possibly a debriefing on Fri 13/09 morning), in MF Conference Centre in Toulouse, WD will be organized on code aspects after the major OOPS steps (CY46), including optimization, some hints about single precision, a few practical exercises on laptops. There will be some free time slots for self-chosen dedicated work. Claude insists that these WD are not for newcomers and the attendees are supposed to already fairly well know the IFS/ARPEGE/LAM codes. The LTMs are invited to contact Claude if they have any candidate for attending these WD.

9. Status of the convergence with HIRLAM

Piet explains that the last joint ALADIN General Assembly and HIRLAM Council approved the scope document and tasked the Convergence WG to work on a proposal for the MoU of the future single consortium. More details can be found on the Zagreb GA webpage
The Convergence WG is working on a draft MoU, to be discussed at next HAC/PAC meeting in May. The governance currently proposed and discussed is not very different from the current ALADIN governance.

10. A.O.B. and Closing

The next LTM meeting will take place in Sofia, besides the EWGLAM/SRNWP meetings, during the first week of October.

Annex 1 : 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.	Code & Cycles			
3.a	Usual MF report on codes/cycles/suites	CF	information	Doc 3.a
3.b	CY43t2_bf10	CF	information	
3.c	Porting of CY43t2 export version by Partners	ACNA	information	Doc[1]
4.	Possible update of LBC files from ARPEGE	ACNA/CF	information	
4.1	E923 configuration	CF	information	
5.	Surfex code contributions by ALADIN partners	DD	information	slides
6.	DA coordinator activities	MM/PT	information	slides
7.	Support team information - Call for contribution for NL13 - RWP2018: manpower status - RWP2020 : actions on the LTMs before next LTM meeting	PP	information	slides
8.	Code/model WD in Tls announcement	PT/CF/PP	information	
9.	Information about progress on the convergence with HIRLAM	PT	information	
10.	AOB	ACNA		

1 Once connected as Partners, http://www.umr-cnrm.fr/aladin/spip.php?article334