

11th ACCORD LTM meeting

Monday 29 April 2024, 14h00 - 16h00 CEST online

Minutes

Remotely Excused/represented Absent

Country	NMS	LTM	representative
ALGERIA	ONM	Mohamed Mokhtari	
AUSTRIA	GeoSphere Austria	Christoph Wittmann	
BELGIUM	RMI	Alex Deckmyn	
BULGARIA	NIMH	Boryana Tsenova	
CROATIA	DHMZ	Antonio Stanesic	
CZECH REP	СНМІ	Radmila Brožková	
DENMARK	DMI	Tommaso Benacchio	
ESTONIA	ESTEA	Ivar Ansper	
FINLAND	FMI	Reima Eresmaa	
FRANCE	MF	Cécile Loo	
HUNGARY	HMS	Gabriella Szépszó	
ICELAND	IMO	Guðrún Nína Petersen	
IRELAND	Met Eireann	Saji Varghese	
LITHUANIA	LHMS	Rimvydas Jasinskas	
MOROCCO	DGM	Siham Sbii	
NETHERLANDS	KNMI	Wim de Rooij	
NORWAY	MET Norway	Jørn Kristiansen	
POLAND	IMGW-PIB	Piotr Sekula	
PORTUGAL	IPMA	Maria Monteiro	
ROMANIA	NMA	Alexandra Craciun	
SLOVAKIA	SHMU	Maria Derkova	
SLOVENIA	ARSO	Jure Cedilnik	
SPAIN	AEMET	Javier Calvo	

SWEDEN	SMHI	Jelena Bojarova	
TUNISIA	INM	Wafa Khalfaoui	
TURKEY	TSMS	Yelis Cengiz	

Claude Fischer (PM), Anne-Lise Dhomps (CSS)

Opening and adoption of agenda (CNA)

0	Opening and adoption of agenda	CNA	
1	Introduction of new LTMs	CNA	
2	RWP2025 and DAP2024 follow_up	PM/CSS	
3	New IFS-Arpege coding norms	PM/CNA	
4	Update on system changes on "belenos"	PM	
5	Update on cycles & "export version"	PM/IAL	
6	Any other matter taken up from the 15 April meeting	PM/CNA	
7	A.O.B.	CNA	
8	Next meeting(s)	CNA	

1. Introduction of new LTMs (CNA)

None

2. RWP2025 and DAP2024 follow_up

Claude shared the timeline of RWP2025 and DAP2024

- Expected calendar of RWP2025 preparation:
 - o first draft ready to provide to LTMs for cross-checks at the end of June
 - add new tasks during the summer in order to redefine or emphasize some tasks (July-August)
 - make available the RWP for commitments by the LTMs at the beginning of September (by about 04/09)
 - give LTMs until the very beginning of October to fill their Commitments tables (DL by about 03/10)
- Reminder of link to the follow-up of DAP2024 ACCORD DAP2024 follow-up
- MG is currently brainstorming on a revised working practice for the DAP2025

Mariska opened the floor for comments/questions. *No comments.*

3. New IFS-Arpege coding norms

Claude gave an update on the actions following the LTM meeting of 14/02/24.

- Answers from ACCORD teams have been collected in the shared file
 Comments on new IFS-Arpege coding norms
- Thanks to the teams who have answered. As such, this action is now closed.
- The comments by ACCORD teams will be forwarded to ECMWF and MF. ECMWF/MF will have a look, then either suggest that some items are raised as GitHub Issues (if they need a discussion for example), or others might be quick fixes, etc.
- The coding norms document has in the meanwhile been made available by ECMWF on a public GitHub repo. Teams are encouraged to raise any requests or proposals for changes to the standard as GitHub Issues on the repository site. Once raised, we'll respond (in general this will likely be ECMWF).
- Link to the github repo: https://github.com/ecmwf-ifs/ifs-arpege-coding-standards

Mariska opened the floor for comments/questions.

Radmila: Recently we saw new files appear with the codes, the .FYPP suffixed files. I'm not sure to understand well how these files and the FORTRAN codes they generate, are aligned with the coding norm.

Also, the new coding norms are only for FORTRAN, aren't they?

Claude: Indeed, they are for FORTRAN. Regarding the question with the .FYPP files, I propose to add it in the shared Google file before sending the collected comments to MF and ECMWF.

Claude: Note also that the meaning and the use of the .FYPP files as such was discussed at the Code & System side meeting of the ASW. So you may also refer to the minutes of the side meeting.

Regarding the use of the GitHub public repo, ECMWF is expecting any user to directly make "GIT Issues" in this repo, and likely in general somebody from ECMWF would take up the discussion line (propose an answer or a fix etc.). Therefore, we expect that the coding norms interaction would not have to be very much centrally organized, and simply the ACCORD teams are invited to post their questions in the repo. They might use their GitHub users for this purpose (ie the GIT user accounts they use for instance to access the ACCORD source code forge).

Actions: Radmila to edit her comment on the .FYPP files in the shared Google file; Claude to send the complete file to ECMWF and MF correspondents.

- 4. Update on system changes on "belenos"
- The system upgrades on belenos are completed
- Detailed information on the potential issues in relation to job submission (by remote partners) has been collected and is listed just below

Information on the potential issues of the system upgrade on "belenos" regarding job submission

Following a system upgrade on belenos which happened recently, two kinds of issues have been identified due to a change in Slurm. These affect only jobs not using MPIAUTO.

Case #1)

Symptom: Jobs ran using mpirun "openmpi/intelmpi", that freeze after being launched Cause: Modification of the binding in mpirun/mpiexec.hydra launchers source code Workaround: Add the following export in the launch_mpi() function to deactivate completely the CPU binding of Slurm:

export SLURM_CPU_BIND=none

Case #2)

Symptom: Important slow-downs of jobs ran with srun

Cause: Modification of srun's autobinding, which does not work as previously in multithread case

Workaround: Force the value of parameter cpu-per-task with \$SLURM_CPUS_PER_TASK in srun command line, with one of the following options:

Method 1:

```
srun ... --cpus-per-task=$SLURM_CPUS_PER_TASK BINARY
```

Method 2 : export this variable before execution of srun export SRUN_CPUS_PER_TASK=\$SLURM_CPUS_PER_TASK srun ... BINARY

Mariska opened the floor for comments/questions. *No comments.*

- Update on cycles & "export version"
- Refer to Alexandre's talk at the ASW

Export version CY48T3

- Initial proposal (last year) of a hybrid version 48T1_op0/48T3 \rightarrow got delayed
- New proposal: pure CY48T3_bf, validated on a few weeks of Arome-France 3DVar, CNT0 and OOPS
 - \hookrightarrow summer 2024
- Additional material:
 - doc on build and run of OOPS executable
 - Arome-France set of namelists + technical necessary namelists updates from CY46T1
 - updated input resources (RRTM files etc.)
 - scores, logs
- Last export version with Arome-3DVar@CNT0 extensively validated
- Last export version of that format (future of export under brainstorming)
- Dedicated deployment discussion: https://github.com/ACCORD-NWP/IAL/discussions/243
- A dedicated meeting for those teams interested in an "old-style" export version might be organized later this year. TBC
- Reminder of the discussion stream in GitHub: https://github.com/ACCORD-NWP/IAL/discussions/243

Claude emphasized that it was not yet clear whether a dedicated meeting was at all necessary. Perhaps the code packaging along with documentation would be enough, followed by a simple email announcement. A meeting could also be decided only after some first feedback by the teams who would be interested by asking questions, is received.

For now, Claude thought that the priority tasks should be for Mariska and him to keep liaison with the key actors in this preparation.

Mariska opened the floor for comments/questions.

Claude and Mariska confirmed that they are taking action to follow up the topic, and keep track of progress with the key actors.

Radmila: You mention that it will be the last export version with MASTERODB validated? Then how about surface assimilation and CANARI?

Mariska: OOPS will be for screening and 3DVAR for the time being. For surface assimilation we could check, but I understood that CANARI would stay out of OOPS at least for now. Claude: we will check but I understood the same as Mariska.

Radmila: it would be relevant to give a clear recommendation to the teams to switch to OOPS with CY48T3.

Mariska/Claude: Agreed.

Radmila: Do you know if ECMWF uses surface assimilation with OOPS?

Claude: I don't know for sure.

Radmila: which method do they use for surface assimilation?

Claude: We will check to give the exact answer (which surface assimilation method and

whether in OOPS or outside)

Actions on Claude with Mariska:

- check the status of CANARI w/r to OOPS: checked with MF, CANARI OI remains out of OOPS
- check the status and plans of surface assimilation at ECMWF (method and OOPS). Post-meeting information gathered from ECMWF (Patricia de Rosnay) by Claude: "We use a SEKF for soil moisture, 1D-OI for soil and snow temperature, and a 2D-OI for T2m, RH2m, and snow mass. Current developments focus on unifying LDAS with soil and snow temperature analyzes integrated into SEKF, using EDA for B, extending the SPP approach to the surface (disturbance of vegetation parameters), and LDAS coupling at the outer loop level. We are not moving to OOPS, and we want to keep the flexibility of running LDAS offline, but all these developments are compatible with OOPS."
- 6. Any other matter taken up from the 15 April meeting

Claude renewed the call for hosting the ASW 2025.

- 1. Organizational aspects:
 - a. the local host is supported by the ACCORD budget with 12 k€
 - b. about 100 in-person participants, as much registered remotely, sometimes about 90 persons connected at the same time
 - c. practical requirements: one plenary room and at least two by-side meeting rooms, reliable telecom device (including an <u>excellent audio/sound device</u> with several mics)
- 2. Suggested dates taking into account ramadhan 1-30 March, Easter 20-21 April, EGU 27 April 2 May :
 - a. 7-11 April or 31 March- 4 April
- 3. Regarding the ASW2024, the MG is proposing to collect feedback from the staff. The suggestion is to make an open forum. We will then analyze the feedback and check what could be adapted for the ASW2025.

Mariska opened the floor for comments/questions. *No volunteers ...*

Claude: Do not hesitate to contact myself and/or Anne-Lise for information, discussions, ... let us know about discussions you may have on your side, in your institute.

We will start to reach out to a few members to check the possibilities with them.

7. A.O.B.

Common Manpower Register

Deadline tomorrow. Only 12 contributions so far!

Action on LTMs: please fill your manpower registration by tomorrow evening!

8. Next meeting(s)

- dedicated meeting for the interested teams regarding the preparation of an "old style" export version: to be confirmed
- perhaps propose an LTM short meeting to explain the proposed changes in the working practices regarding the DAP, once the MG has finished the brainstorming on any such adaptation. However, also any such meeting **to be confirmed** (an email information might be enough to start with?)
- upon proposal by Mariska: we will first wait for more feedback about the export version preparation before proposing a poll for another LTM meeting
- no other intermediate meeting planned until EWGLAM
- hybrid LTM meeting besides EWGLAM. Tuesday 1 October in the second half of the afternoon is under discussion. Date and time TBC

Claude and Radmila briefly exchanged on the appropriate contact person at CHMI regarding the agenda preparation for EWGLAM (Claude was so far only in touch with Chiara). In CHMI, this will be Petra. Radmila confirmed that a time slot for the LTM meeting was planned in the draft agenda. Claude probably will contact both Chiara and Petra to keep track of the organization of the ACCORD meeting.

For any other LTM meeting before EWGLAM: Mariska will organize a doodle in 3 weeks time if necessary.

15:20 Mariska closed the meeting.