10th ACCORD STAC meeting

21 May 2025 10:00-13:00 CEST

online

ACCORD
A Consortium for COnvection-scale modelling
Research and Development

Minutes

Participants

Flat-Rate ALADIN MoU5 Representatives	Michiel Vanginderachter (Belgium)
	Yelis Cengiz (Türkiye)
	Rahma Ben Romdhane (Tunisia)
RC-LACE-MoU5 Representatives	Christoph Wittmann (Austria)
	Andre Simon (Slovakia)
	Jure Cedilnik (Slovenia)
HIRLAM-C Representatives	Saji Varghese (Ireland) **STAC Chair**
	Sami Niemelä (Finland)
	Javier Calvo (Spain)
Météo-France Representatives	François Bouyssel **STAC vice-Chair**
	Alain Joly (absent)
	Christine Lac
ACCORD PM	Claude Fischer
ACCORD CSS	Anne-Lise Dhomps
ECMWF Observer	Stefen English
System & code AL invited	Daniel Santos Muños

1. Opening

Saji opened the meeting at 10:03.
He welcomed the participants to the 10th STAC meeting, more specifically the new members and he gave the floor to them.

Michiel: I'm working at RMI, in Belgium. I will be replacing Rafiq. I've been working on ARPEGE physics parameterization and recently I've worked on AI/ML topics.

Andre: I've been working at SHMU in the NWP team since 2019. I work on the development of new

cycles and in WP10 of DEODE on HR.

Javier: I'm working at AEMET.

2. Adoption of the draft agenda

The agenda is adopted by the STAC.

3. Progress of the scripting Task Force and roadmap

Claude reminded STAC that the Task Force is co-lead by Daniel Santos and himself. The other members are Xiaohua Yang, Ulf Andrae, François Bouyssel, Thibault Lestang, Zahra Sahlaoui, Alexandre Mary, Martina Tudor.

The A/A on 9 December approved forming a Task Force (TF) to work out a roadmap for the common scripting system (this topic has been recognized as very sensitive during the preparation of the scientific strategy), with the aim to present the scripting roadmap proposal to the A/A at its meeting of 7 July. The mandate of the TF therefore finishes at the end of June.

The TF met five times online (1h30) and once in-person (ASW2025).

At first, the high-level requirements were discussed based on a User Stories approach. The availability of these high-level requirements within the DEODE scripts has been evaluated. Mainly, one missing requirement has been identified, which will require an analysis and development work on ACCORD resources.

Claude detailed the current status and next steps:

- a simplified draft list of tasks has been made
- two additional online meetings are planned in order to draft a more detailed list of tasks, including an evaluation of resources whenever possible
- the aim is to have this draft detailed list ready for mid-June, to be presented at a dedicated STAC meeting in the end of June
- presentation at the A/A on 7 July, including STAC recommendations

Saji gave the floor to Daniel, as co-chair of the TF.

Daniel: Claude did a complete presentation. I have nothing to add.

Saji gave the floor to François, as part of the TF.

François: I have a comment as a STAC member. I found the discussion in the TF very constructive and positive. The TF was asked to provide actions. I regret that, because of the time constraint, we didn't have time to study the pros and cons of tools existing in other scripting systems (eg MF, ECMWF etc.) nor how to manage the transfer from one scripting system (e.g. DEODE) to another one. These aspects however were part of the initial mandate given to the TF.

Daniel: I'd like to remind that the process has not started with the TF, but when we wrote the strategy, and then DEODE was the more promising alternative. Nevertheless, part of the features

present in VORTEX for instance will be useful. In DEODE there is one missing component, probably very useful for DA. We can analyse how such a feature or component has been done in another system (like Vortex), how to adapt it to enhance the ACCORD scripts and therefore build synergies with DEODE.

Sami: *I really welcome the fact that we started with DEODE. But are we sure that we are covering all the needs by the user stories ? Should we contact the teams to have their comments ?*

Daniel: *Regarding the missing feature identified so far, the function in Vortex links in a certain way the needed files (resources) with their several possible locations (storage and pathways). In DEODE the structure does not work the same way. But we can mimic it in the DEODE structure.*
For the record, we had more than 50 user stories which are covering scientific developments, operations, IT, …

Saji: *I'm quite happy with the progress that has been made, but for sure, everything couldn't be done in such a short time. Some tasks will probably have to be continued, as tasks in future RWP.*

Claude: *Regarding what has just been said,*
1/ I agree that the idea of facilitating the transition from a scripting system to another has not been addressed much in the TF. Neither the study of existing tools that could accelerate the development of the ACCORD scripts especially for complex configurations like DA.
2/ Some of these pending analysis tasks will have to be reflected in the roadmap again. Thus the roadmap will not be only about development or implementation, there will be analysis tasks as well.

François: *When we will deal with the analysis for a configuration like 4D-ENVAR, having some passway, some tools that ease the convergence (the transition) would be great.*

Saji: *This will have to be further analysed indeed.*

Daniel: *We need to recognize that the convergence will require time. In the strategy, it is clear that the common scripting system is not mandatory for operation, so it allows a smoother transition. Moreover, an effort will be needed on documentation and on portability.*

Christoph: *I thank the TF for the work. It was a very difficult task to take on. I have 2 comments:*
1/ point 8: establishing a data portal . I didn't expect that task, but I'm happy about it.
2/ point 7: is there already any idea on how to adapt the scripts to a baseline DA configuration ?

Daniel:
1/ it will be necessary to have version control also for the data we want to store. The task is not directly linked to the scripting system, but it's related in some way.
2/ We can not afford to deal with all DA versions right away. The analysis task for DA in the roadmap will include defining a baseline DA.

Claude: *The baseline version considered so far is 3D-VAR and surface assimilation with CANARI, perhaps at first only surface assimilation. Already then, there will be an issue to check whether the 3 CSCs can be implemented using SURFEX for the surface.*

Christoph: *Thank you for the answers. I support 3D-VAR for being the largest common base for everyone to look at.*

Claude: *Given the complexity of DA (and also EPS, EDA) and the variety of possible versions, we might have to continuously define new, adapted analysis tasks in the roadmap (as we make*

progress). The early analysis tasks would be stopped once their outcomes have been actually implemented, and replaced by new ones.

Javier: Taking into account the resources, would it be possible that the work in DEODE is being accounted for in ACCORD ?

Claude: we will definitely need to have ACCORD-own manpower to implement the roadmap. Some DEODE funded manpower could be used for some tasks, but mostly we will need ACCORD manpower for our ACCORD objectives.
DEODE is not aiming for Data Assimilation, so we won't be able to rely on DEODE for this. We have to analyse the current functions of DEODE and the new requirements found out when analysing the user stories. We will also need some knowledge transfer.

Andre: What are the expectations from users? Should we ask ?

Saji: Shall we organize a consultation with families ?

Claude: In the TF we decided to build and describe the user stories for the purpose of describing many use cases. We ended up with about 50 user stories covering many aspects of use (as a researcher, as an IT person, as an officer in charge of monitoring the suites etc.).
If we had wanted to take into account more external user expectations, the organisation of a survey would have taken some significant time. I think that we have a fair variety of people already in the TF in order to cover lots of cases (this was one incentive for forming a mixed TF with both managers and developers/users of scripts).

Daniel: I agree that we cannot take into account all the possible expectations. The scripts will evolve over time anyway.

(shared in the chat)
User Stories classification in categories:
- Experiment Interaction and Execution
- Monitoring and Diagnostics
- Data Management and Collaboration
- System Maintenance and Configuration
- Documentation and Support
- System Flexibility and Resource Management
- Error Handling and Testing

Andre: Thank you for your answers.

Michiel: Back to the synergy between ACCORD and DEODE. Is it a goal to have DEODE and ACCORD scripting developments aligned ?

Daniel: The objectives of DEODE are different from ACCORD.
We need to recognize that DEODE has benefited from ACCORD, and some people funded by DEODE are also working for ACCORD.

Michiel: Do you expect that some transfer of developments will remain possible over time nevertheless ?

Daniel: We want to co-develop indeed.

Claude: I agree with Daniel's comments on the desired synergy and co-development between DEODE and ACCORD. We don't know yet how much this will be possible. DEODE has its own goals and deliverables. But we will try to keep in sync as much as is doable and beneficial.

We could share the user stories with STAC. We are in a very constrained timeline, but they could be shared as complementary documents for our next STAC meeting.

Andre (chat): I think that would be positive to see the user stories.

Daniel: I also want to remind you that the process started during the preparation of the strategy with consultation of experts, then the families. I think that the representation of all uses, or of all families, is very fair.

Saji to Claude: what would be the take away messages.

Claude: from my side:
- *complementing the simplified list of tasks (as shown to STAC today) by more concrete details and manpower/expertise requirements, will be the backbone of the roadmap;*
- *we could try to further discuss in the TF how to take into account the facilitation of the transfer from one scripting system to another. Bring this up at our next and last TF meeting;*
- *make available to STAC the user stories to illustrate their variety and relevance;*
- *work out the baseline DA (3Dvar, CANARI, same utilisation of SURFEX for the CSCs, obs handling)*

Daniel: agreed.

François: I would like to complement my point that the missing link in the DEODE scripts is the requirement to be able to couple an experiment with another one[1].
Such a feature really is needed to build a complex and useful scripting.

Daniel: I think that DEODE is able to manage such a coupling of resources between experiments. We need to analyze how doable and how friendly should it be ?
VORTEX is very efficient to find the links and make this coupling. In DEODE you need to mimic this behaviour.
I think that it's doable with ACCORD manpower.

Claude: I agree that we need, in ACCORD, to work more on this analysis, probably check it when implementing DA.
We also will have to take care of the synchronisation of DEODE and ACCORD versions of the scripts. As much as such sync will be possible and meaningful.
We need to further analyze how much resources are needed for these aspects, what can come from DEODE and what ACCORD will have to provide.

Daniel: The work on the scripting has started before the strategy for ACCORD phase 2 started. It is a very long way to have a common scripting system. Now we are closer to knowing how we are going to have it, and we need to acknowledge the work of all the people who worked on it.

Stephen English ECMWF 11:19 AM
Hi, I have very little to say as an observer to this discussion but have been happy to hear the

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[1] *note by Claude: "couple the resources of an experiment with another, existing experiment, in order to make a new comprehensive experimental workflow which "inherits" these resources"*

sensible points made, well done to the Task Force and STAC. I will leave now to have just a moment to grab a coffee before my next meeting. Just to confirm Michael Sleigh will stand in for me on 27th. Thanks.

4. Date and time for the additional STAC meeting

21 May (today!)

27 June 11:00-13:00 CEST: scripting roadmap; Area Leader functions;
online: https://meteo.webex.com/meteo/j.php?MTID=m3015e85d7642b3961bdbaaba5d9c044a

4-5 November in-person in the premises of Geosphere Austria (Vienna)
- noon-to-noon
- hybrid will be possible: https://meteo.webex.com/meteo/j.php?MTID=m84bbcc7f2c1dcc920209cad03bf3af49
- last STAC meeting under MoU1 => make it jointly with AMG ?

Claude thanked Christoph to host the autumn STAC.
Saji thanked Claude.

5. Update on the organisation and preparation/timeline for the next phase.

a. Nomination of the PM

The Assembly officially nominated Claude FISCHER from Météo-France as Programme Manager of the ACCORD Consortium from 1st January 2026.

Claude thanked again the ACCORD Members for nominating him.

b. Nomination process of CSC Leaders

Claude reminded that this point was for information purposes only.
At the last EA, the Assembly agreed on the CSC leaders' nomination steps and on the CSC groups. There are 3 Canonical System Configurations in ACCORD. Each group is composed of the Members who use the CSC.
Table 1 shows the lists of members per CSC agreed during the last Assembly. Spain eventually asked to be added to the ALARO group.
The last Assembly agreed that each CSC group should organise the nomination of their CSC leader in a way that best suited their selection process.

AROME	ALARO	HARMONIE-AROME
Algeria	Belgium	Denmark
Austria	Croatia	Estonia
Belgium	Czech Republic	Finland
Bulgaria	Hungary	Iceland
France	Morocco	Ireland

Hungary	Poland	Lithuania
Morocco	Romania	Netherlands
Poland	Slovakia	Norway
Portugal	Slovenia	Spain
Slovenia	Türkiye	Sweden
Tunisia	*Spain*	
Türkiye		

Table 1: lists of ACCORD Members according to their operational use of a CSC

Claude presented the status for each CSC group.

HARMONIE-AROME: The new CSC Leader is expected to be nominated in September (next UWC Programme Manager). In the meantime, the current CSC Leader (Jeanette Onvlee, KNMI) will participate in the needed transition steps.

Regarding ALARO and AROME CSC, the bureau discussed how to organise the consultation and selection process for both groups. A first consultation meeting was proposed for each group.

ALARO: Consultation meeting on 5 May, where representatives of the institutes discussed the received application. The representatives are checking to confirm the support at the level of each institute (DL: 16 May). 11 (out of 11) positive answers received.

AROME: Consultation meeting on 7 May, where representatives of the institutes discussed the received application. The representatives are checking to confirm the support at the level of each institute (DL: 16 May). 12 (out of 12) positive answers received.

The outcome of the process will be explained in the Bureau and the two names will be proposed as well as the status for HARMONIE-AROME at the next Assembly, the 7 July, for a formal approval of the nominations.

Claude said that for AROME and ALARO, it will be in continuation of the current phase.

The target is to present the full proposal to the A/A at its meeting on 7 July, to approve the names.

c. Procedure for defining the MG structure (Area Leaders)

Claude reminded that this point is for information purposes only in this STAC. The A/A on 10 March agreed to form a Working Group tasked to propose the list and the definitions (the functions) of the Area Leaders for phase 2.

The Assembly approved the composition (chair and vice-chair of STAC, CSC leaders, PM, CSS) of this WG.

The Assembly agreed on the tasks for this WG:

- Define the precise list of Area Leader functions for the start of phase 2. Note: 8 such AL functions in phase 1.
- Define the precise ToRs for each function, which will complement the general ToRs agreed in the draft MoU-2.

Claude explained that the organization of the WG really started at the very end of April with 3 online meetings scheduled (1h30 each) in May and June. A draft (incomplete) online working document has been prepared and a specific STAC meeting is planned for the very end of June, in order to analyze the proposal and make a recommendation for the 10th A/A.

The target is to present the full proposal to the A/A at its meeting on 7 July, for approval.

d. Transition: headlines of timeline regarding the management positions

Claude reminded the timeline for the transition (grey what has been done so far):

- **A/A 1-2 December 2025**: Approval of all other management positions

- in the end of October or in the first half of November: Interview the AL candidates

- **A/A 9 October**: Budget aspects; Discuss any pending issue (management, status of signing)

- July 2025: Call for applications to the other management positions (DL for receiving answers: Friday 10 October 2025)

- **A/A 7 July**: Approve nomination of CSC-Leaders; Approve the structure of the MG (ie the list of Area Leaders); Discuss the management positions which require a Call for application; Discuss other management positions and approve the first nominations

- May-June: preparation of the definitions of the Area Leader functions (Working Group)

- May 2025: Procedure for nominating the CSC-Leaders is organized within each list of "CSC institutes"

- **A/A 13 May**: Nominate the PM for phase 2

- 2nd half of April or in the beginning of May: interviews of the PM candidates

- March-April 2025: Consultation for the CSC Leaders (facilitated by the PM+CSS if needed)

- **A/A 10 March 2025**: Approve the procedure for listing the "CSC institutes" & Approve each list of "CSC institutes" (*each list then agrees on how it organizes the selection of the corresponding CSC-Leader*);

- December 2024: Call for application for the PM position (DL of receiving answers: Friday 4 April 2025); **DONE ON 20 JANUARY 2025**

- **A/A 9 December 2024**: Discuss the procedure and the timeline, as well as the Selection Panel and the Call of application for the PM position; *provided the A/A approved the scientific strategy with no reserve (item 10) => APPROVED*

Saji: We have a new PM now, congratulations Claude. We have CSC Leaders and ToR for AL are being prepared.

Saji opened the floor to comment.

Sami: thanks Claude, tracks are very clear, from the beginning. Regarding the AL functions, I understand that the WG is working on it at the moment, but are you in position to detail a bit more ? Will the MG structure stay more or less the same ?

Saji: Broadly speaking it would be in line with what we already had, but we will have to adapt to the disruption created by the arrival of AI/ML. The code refactoring for GPUs will come to an end in 1-2 years. It may be amalgamated with others WP, but we have to add more clarity on it during our next meetings.

Claude: Indeed, the code refactoring will end, but the code evolution aspects will still exist. So we have questions marks so far on how to organize it. There is a need to continue to organize tasks in code evolution and its consequences. Also the evaluation of the performances of our codes on new architectures will continue during phase 2.

Another aspect is that the WG-AL has left it very open about how to deal with the necessary tasks to monitor the progress done on AI/ML and what's happening in the European projects. It is not yet clear whether this should be the task of a single person, or of a group (an existing one or a new one).

Saji:You are very welcome if you have some comments.

Sami: In the UWC context we did the same exercise of the organisation of a structure for the next phase. I recognise any position related to AI/ML is very difficult because of lots of different points of views. We then had a good discussion in the UWC Assembly about why we need a specific AI/ML officer.

Claude: We should not try to give the impression that we want to duplicate what is done in different contexts or what is organized in some of our groups. But we may have specific needs in ACCORD to organise work such as to prepare our current codes and systems for the arrival of AI/ML components.

Important points here are: How to organize some feedback, the need for information on EU initiatives. How ACCORD can be informed of the evolution of those initiatives (science, data, teams, resources ...). How they are organised, discuss where ACCORD could bring something in and how the AI/ML resources in turn impact the ACCORD planning.

Sami: What is clear is the large panel of points of view and the need for flexibility.

Michiel: I'm RMI representative for this EU initiative. So I can be a link.
I agree with Claude that we need some communication.

Saji: I do agree as well.

6. STAC composition 2026-2028

Claude reminded the STAC members about the current composition of STAC.

Members	Family
Saji Varghese (chair), Sami Niemala, Javier Calvo	HIRLAM
François Bouyssel (vice-chair), Christine Lac, Alain Joly	Météo-France
Yelis Cengiz, Rahma Ben Romdhane, Michiel Vanginderachter	ALADIN-MoU5
Christoph Wittmann, Jure Cedilnik, Andre Simon	LACE

Alain Joly is now preparing his leave for retirement.
We could thank Alain for all his very constructive and useful inputs to the ACCORD STAC.

The mandate of the members will be 2,5 years (from the beginning of 2026 until mid-2028).

The formal procedure and the timeline for the nomination of the members reads:
- In order not to delay the procedure, the current members are invited to start checking for themselves, and with their families, whether they continue in phase 2. (May)
- The PM will inform the relevant key representatives of the families about the start of the renewal process, and keep regular liaison with them. This liaison will take different shapes according to each family:
  - MF: internal discussions
  - Hirlam/UWC: chairs of Hirlam and of UWC
  - LACE: chair of LACE
  - Aladin-MoU5: the PM+CSS will keep in touch with the current STAC members, and organize at least one consultation meeting with the LTMs
- The PM+CSS will collect the proposals by the families until the end of August, and share them with the Bureau (in September)
- The target is to submit the A/A at its meeting of 9 October a full composition of the next STAC for phase 2, for approval
- Finally, propose the names of chair and vice-chair at the A/A of 1-2 December, for approval

For ALADIN, CSS + PM will organise a meeting with Yelis, Michil, Rahma and LTMs of the concerned countries.

Claude: *Personally, I'm seeing a certain value on having new members. But I also see a value to a few longer mandates for a better continuity and history.*
So we do not need a strong renewal.

Saji: *to sum up:*
- *mandate of the members will be 2,5 years*

- *The current members have to check whether they continue in phase 2.*
- *inform PM+CSS*
- *new persons and continuity are both important*

no comments.

7. Closing

Saji thanked everyone for excellent contributions and discussions, especially the new members who participated efficiently in the meeting.

Claude thanked Daniel and emphasised that there still was some good work ahead for bringing the topic on the Common Scripting System forward. He also thanked Daniel for helping answer the questions and comments.

Saji thanked Daniel for his contribution today and the co-chairing of the TF.

And closure of the meeting.