SNO RAMSES

Progress report for 2025

J. Blaizot – Nov. 24, 2025

The RAMSES SNO project

The ultimate aim is to increase the amount of science done with RAMSES. There are 4 challenges to address for that:

1/ **The code has to be easy to use and to develop** — support for users and developers.

2/ **We need to stay in touch with a growing international community** — Community management

3/ **We need to keep mastery of the code and make best use of community developments** — ~~Define and~~ maintain a reference version.

4/ **We need to be able to use the code on large international facilities** — The exascale problems : perfect scaling and performance portability.

The RAMSES SNO project

A consortium of **6 OSU**'s represented by **J. Blaizot** (OSUL, coord.), **Y. Dubois** (IAP), **M. Gonzalez** (OSUPS), **P. Ocvirk** (ObAS), **S. Peirani** (OCA), **A. Le Brun -> M. Trebitsch** (OP).

We have put in place an **international advisory board** in which major RAMSES development nodes are represented (J. **Devriendt** / Oxford, R. **Teyssier** / Princeton, T. **Haugbolle** / Copenhagen, S. **Yi** / South Korea).

The SNO was launched in Summer 2023.

CNAP — new « Tâches de service »

T1 – Animation et pilotage du service.

T2 – Community management and training.

Organisation of SNO events for community building and training. Support for users and developers.

T3 – Continuous integration of community developments.

Integrate selected community developments into the public version, validate results and perfs, make sure documentation is in place, as well as tests and possibly tutorials.

T4 – Preparation for exascale.

Monitor exascale initiatives, contribute to porting RAMSES physics into exascale prototypes and to benchmarking them.
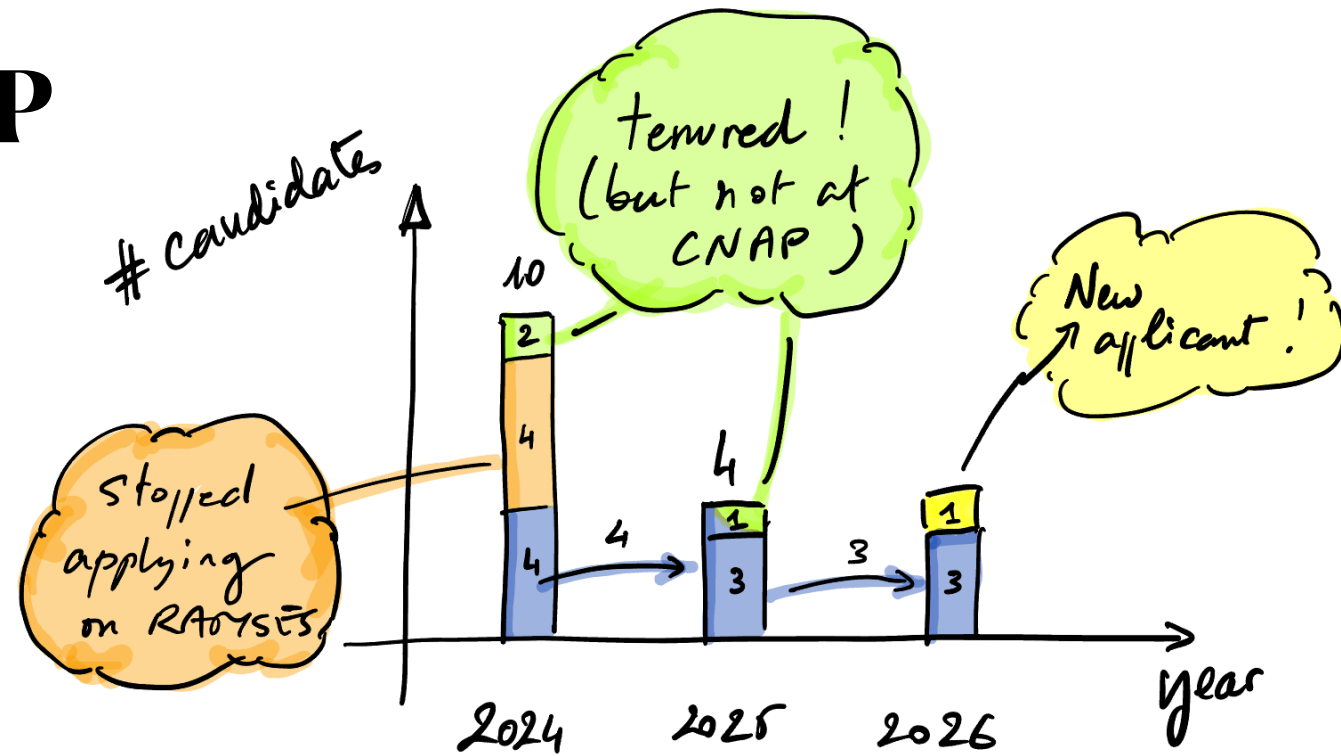
HR situation

Congratulations to Joe Lewis for his new job at CEA ! 👏 👏 👏

Our **SNO still has no engineer support** … we are hoping for a position opening by CNRS **in spring this year**.

HR situation - CNAP

10 candidates in 2024
4 candidates in 2025

Candidates in 2026 :

Noé Brucy, Marion Farcy, Arturo Núñez-Castiñeyra, Emma Aycoberry,
+ anyone else ?

Reminder: all applicants must contact the SNO board as early as possible,
and prepare (part of) their application with us.

Highlights from 2025

RUM 25 in Strasbourg
Thanks to P. Ocvirk \o/

RUM 26 will be in Seoul (April 27 — May 2)

Evaluation report for INSU

How much did we work over the 2 first years of the SNO:

0.5 FTE for coordination and webpage.

1.8 FTE for community management and training.

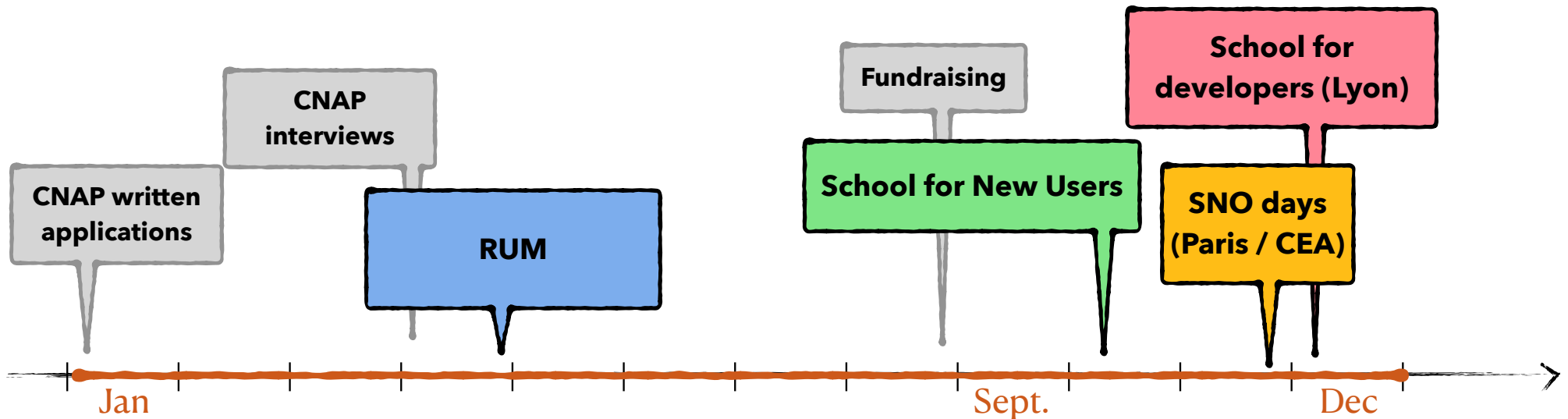**0,6 FTE** for continuous integration of community developments.

1.6 FTE for preparation for exascale.

   -> **4.5 FTE over two years !** 🙏

Reporting revealed some weaknesses in coordination -> we are trying to improve this with more regular and structured board meetings.

Unofficial feedback suggests a positive evaluation.

We have (almost) **reached a permanent regime**

All **recurring events** we wanted to setup have been setup (2 schools, 2 annual meetings) as well as **monthly board meetings** and **working group activities**.

To be improved: communication (newsletter, webinars).

RAMSES Schools

School for New Users (-> Maxime Trebitsch's talk & discussion)

- 2 editions with > 10 attendees.

- Legacy value: material was used in the UK (Ricarda Beckmann).

- 3rd edition will be in Strasbourg in Fall 2026.

School for Developers

- 1st edition in two weeks - **7 registered participants**. … in prep … 😱

- Next edition in Paris ?

RAMSES on GitHub.

https://github.com/ramses-organisation/

- Simplification of the RAMSES Git flow: **one single brand « dev ».**

- **Code release (may 2025)**, -> tagged version with a detailed changeling (Thanks to **Noé Brucy**).

- The new forum GitHub Discussion is working well (Thanks to Noé again).

- The material from schools in on GitHub under the ramses-organisation umbrella.

Active Working Groups

Internal training / Webinars

See Amandine's presentation on Wednesday. Please contribute to discussions on this.

Tests

See Tine's presentation on Wednesday. Please contribute to discussions on this.

OMP

See Tine's presentation on Wednesday. Please contribute to discussions on this.

Back to the future ...

Where should we be one year from now?

- ✅ In Paris again ? Meudon ? Saclay ? Strasbourg ?

- ✅ 2nd RAMSES school for new users (**where** ?).

- - 1st RAMSES School for developers (in Lyon?).

- ✅ A broader test suite.

- - a full first version of the documentation for users.

- ✅ A beginning of documentation for developers.

- - A regular newsletter...

- ✅ A fully operational webpage.

Where should we be one year from now?

Secured permanent IR position for the SNO.

3rd edition of the School for New Users in Strasbourg.

2nd edition of the School for Developers in Paris.

Full coverage of the code by the test suite.

An MPI+OMP version of RAMSES.

SNO days (in Lyon ?) — a broader impact on the non-ramses community.

New format for webinars.

Newsletter.

A change of coordinating OSU.