

Climate Modelling Infrastructure Workshop

We would like to invite you to participate in a series of two 2-hour workshops to help design the future of the European climate modelling infrastructure.

Climate modelling depends on the skills and infrastructure required to develop, run, and analyse models. Much of that infrastructure is opaque to most of the modelling community, which is as it should be: one of the definitions of infrastructure is that it is something that you depend on but which you only notice when it is broken or absent. However, it requires coordination and funding, and in Europe a considerable amount of that coordination and funding has been and is carried out by projects funded by the European Commission, running under the auspices of the European Network of Earth System Modelling (ENES).

Two current projects (IS-ENES3 concentrating on supporting climate science and services, and ESiWACE2 on next generation climate modelling) underpin a range of activities in Europe, but many will not be aware of their existing or potential dependence on these projects. The European Commission is very unlikely to continue to fund these activities as it considers they are mature enough that national funding agencies and the community itself should take on the responsibility. Both IS-ENES3 and ESiWACE2 projects have thus a dedicated task to build a sustainable research infrastructure for our community. Substantial underlying services are funded at a national level: what is at stake here is the work needed to integrate services at a European level. This work delivers both direct benefits in the form of tools and services and also substantial indirect benefits through synergies between contributing national infrastructures. As a consequence, ENES is looking to establish greater understanding in the community of what is at stake and in doing so, gather information about what might be sustained with reduced or non-existent European funding. To that end, ENES is running two virtual workshops to discuss the community infrastructure underpinning model development and execution, data services, and model analysis and evaluation. All members of the European climate modelling community are invited to attend some or all of these workshops, although registration may need to be limited if uptake is too large. These 2-hour workshops will be held around two domains of the ENES Research Infrastructure (ENES-RI, Fig. 1) as follows:

1. Models, Tools and HPC, 2 Dates: 10 Nov. and 19 Nov. 2020, 10:00 - 12:00 CET
2. Data Services and Data systems, 2 Dates: 12 Nov. and 17. Nov 2020, 10:00 - 12:00 CET

The current activity aims to screen the expectations of different parties involved or benefiting from the European Climate Modelling Infrastructures.

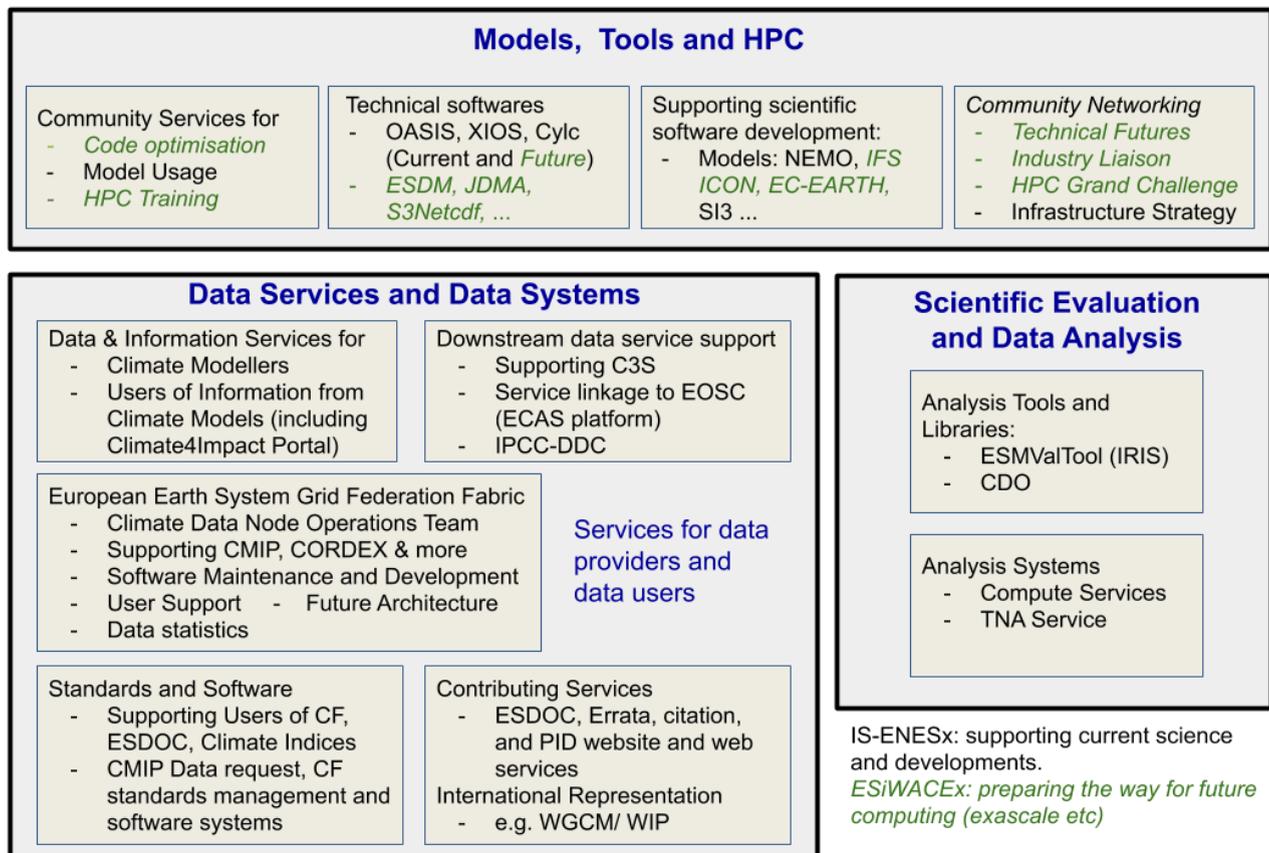


Fig 1: Activity diagram of the ENES-RI encompassing the following domains: (1) Models, HPC and Tools, (2) Data Services and Data Systems and (3) Scientific Evaluation and Data Analysis. Contributions from IS-ENES3 and ESiWACE2 are respectively displayed in black and green.

Workshop content

Each workshop will begin with a short presentation outlining the existing domain of European climate modelling services, and what is known about existing funding and sustainability. The bulk of the time will then be spent getting feedback on whether and how these activities should be taken forward. The following questions will be addressed:

- 1- Which are the most important ENES tools/services?
- 2- How would the absence of specific services affect science? For you, for your institution and for your community.
- 3- Future funding options are complex, but in principle, do you think your institution could or would be open to contributing (in kind or with a subscription) to ensuring the financial stability of these services? If not, would you expect to stop using the services?

The outputs of these meetings will be fed to the IS-ENES3 scientific scoping workshop (Spring 2021), where the sustainability plans will be further discussed with the ENES Community and stakeholders of the infrastructure to establish tangible proposals for the sustained infrastructure.

Simultaneously, a Community Infrastructure Foresight Workshop will be held in Spring 2021 to discuss what infrastructure the science needs for the next decade and develop a more comprehensive long-term strategy.