



D3.3

Report on NICEST2 FAIR climate data hackathon

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Deliverable description

D3.3: 1 hackathon with FAIR experts and ESM specialists to understand what needs to be done to make climate data FAIR (for NorESM and EC-Earth). (M9)

This event was held over three half days:

- Day 1: Thurs 11 Mar 2021, 13:00 - 17:00
- Day 2: Tues 16 Mar 2021, 13:00 - 17:00
- Day 3: Wed 17 Mar 2021, 13:00 - 17:00

Due to coronavirus restrictions the hackathon was a virtual event conducted using zoom.

Planning and organization

An organizing committee was constituted in August 2020 and met regularly to plan for the event (fortnightly up to Dec 2020, weekly from January 2021). Planning meeting minutes were recorded for all meetings: [organizing committee minutes](#)

Organization committee: Hamish Struthers, Anne Claire Fouilloux, Prashanth Dwarakanath, Tyge Løvseth, Matus Kalas (Uni. Bergen, ELIXIR Norway), Adil Hasan (EOSC-Nordic)

Registrations were managed using NeIC's Indico page:

<https://indico.neic.no/event/177/overview>. Advertising for registrations was made via personal networks, NeIC and NICEST2 pages and in the [EOSC-Nordic newsletter](#). A total of 29 registrations were received.

Hackathon information pages were maintained through the NordicESM github repo: <https://nordicesmhub.github.io/nicest2-fair-hackathon/>. Space was allocated on NIRD (https://documentation.sigma2.no/files_storage/nird.html) and available example model output and tools were uploaded for practical work.

The Hackathon documentation

The full agenda for the three days along with recordings of presentations can be found in the following links. HackMD was the platform used for live note-taking. All participants were allowed and encouraged to contribute to the HackMD records. HackMD notes (anonymized):

- [Day 1](#) (agenda and presentations)
- [Day 2](#) (agenda and presentations)
 - [Common session](#) (HackMD notes)
 - [Cookbook breakout group](#) (HackMD notes)
- [Day 3](#) (agenda and presentations)
 - [Cookbook breakout group](#) (HackMD notes)
 - [Idealized citation breakout group notes](#), [ReproHack analysis](#) (HackMD notes)
 - [Ontology breakout group](#) (HackMD notes)

All the results of the hackathon have been archived in zenodo with DOI <https://doi.org/10.5281/zenodo.4895082>

Summary and Outcomes

There was a broad spectrum experience and interests represented by the participants including:

- Students and early career researchers, experienced researchers and service/support staff
- Climate specialists, data specialists, data managers

There was also a wide range of perspectives and expectations, from individual researchers wanting help with making their data FAIR through to individuals with an EU and international focus.

Given these factors, it was not easy to identify concrete, well defined tasks to work on in the practical sessions. It was, however, a very valuable exercise in bringing together a diverse group to discuss a range of issues regarding FAIR climate data. In hindsight perhaps, this event could be better described as a workshop rather than a hackathon.

Three areas of focus that were identified and given some attention in breakout groups were:

- FAIR data cookbook for climate: A skeleton outline of a FAIR cookbook for climate data, for Nordic researchers was written and will be made publicly available via NordicESMHub for development/contributions.
- Idealized citation: A RetroHack style analysis of a recent paper was performed with a focus on the citation of climate data. Findings and recommendations can be included in the FAIR cookbook.

- Ontologies: Broad discussions on the available ontologies/metadata standards for climate data and potential synthesis of such information. Suggestion of a possible white paper or roadmap.

(see HadkMD notes above for more details).

Another outcome was the recognition that involving and encouraging early career researchers in FAIR climate data work can be very helpful in facilitating uptake. At least one PhD student from Stockholm University/Bolin Centre was identified and showed enthusiasm for being involved in follow up.

There is a lot of work to be done after this event and perhaps as a lesson for future events more resources and time could have been allocated for follow up.

Finally it is important to note and acknowledge the very valuable external assistance of Matus Kalas and Adil Hasan in the planning of this event.