

ESiWACE3 Newsletter

Issue #12 / May 2026

News

EuroCC2 Success Stories 2025 booklet



We're featured in the new Success Stories 2025 booklet

We're happy to share that our work has been featured in the newly released Success Stories 2025 Booklet, produced by Castiel2. The publication brings together inspiring examples from National Competence Centres (NCCs) and Centres of Excellence (COEs) across Europe, highlighting how advanced computing is helping organisations solve complex challenges and innovate.

Being part of this collection reflects the collaboration, expertise, and commitment of our team and partners. It's encouraging to see how initiatives like this showcase the real-world impact of high-performance computing – from supporting SMEs to enabling cutting-edge research – and we're proud to contribute our own story to this broader European effort.

We invite you to explore the booklet and discover the range of projects driving progress across borders and sectors. 👉 Read the full publication [here](#).

ENES HPC Workshop 2026: Preliminary agenda

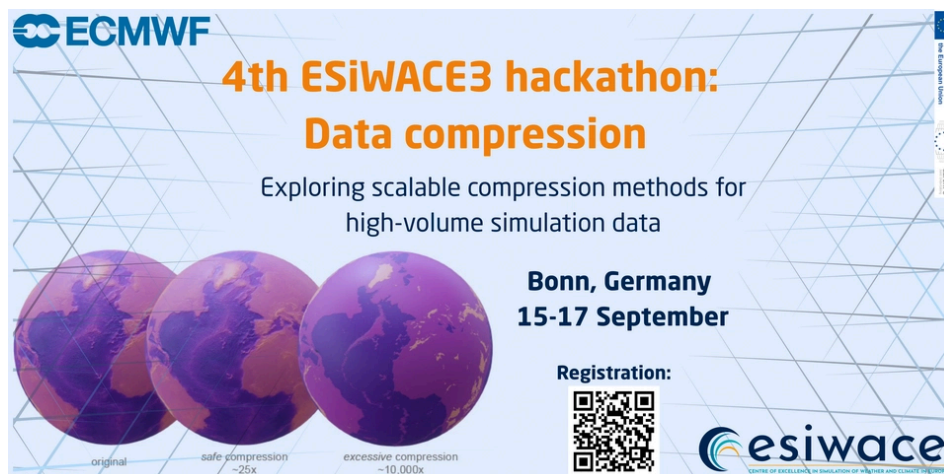


The ESiWACE3 has published the preliminary agenda for the [9th ENES HPC Workshop](#), taking place from 19–21 May 2026 at SMHI in Norrköping. The workshop will bring together scientists, software developers and HPC experts to discuss the future of climate and weather modelling in the exascale era.

The [programme](#) is structured around four main themes: collaboration between infrastructures and initiatives, performance and accelerator technologies, AI and machine learning applications, and data challenges such as workflows, compression and infrastructure. Speakers from organisations including ECMWF, BSC, DKRZ and CMCC will present developments in forecasting systems, optimisation strategies and AI-driven methodologies.

The 2026 edition will once again provide a space for open discussion, knowledge exchange and the identification of future directions for HPC in climate and weather modelling.

Registration open: ESiWACE3 Data Compression Hackathon



Registration is now open for the ESiWACE3 Data Compression Hackathon, taking place from 15–17 September 2026 at ECMWF in Bonn and online.


The hackathon addresses one of the key challenges in weather and climate science: the rapid growth of model data volumes. It will bring together experts in data compression and Earth system modelling to collaboratively explore solutions that reduce data size while preserving scientific integrity.

The 2.5-day programme will feature tutorials and short talks, followed by hands-on collaboration in interdisciplinary teams working on real-world datasets.

Participants will test methods, define requirements, and develop practical compression strategies applicable to operational and research workflows.

 Registration deadlines:

In-person: 31 July 2026 Online: 31 August 2026

 More information and registration [here](#).

ESiWACE3 at EGU26: HPC, Data Compression and Community Engagement



ESiWACE3 had a strong presence at EGU26 in Vienna, contributing to a full week of scientific sessions, posters, oral presentations, PICO talks and community activities focused on high-performance computing (HPC) for Earth system science. Overall, ESiWACE3 contributed with 3 oral presentations, 6 posters, 1 virtual poster discussion, 1 PICO presentation, 1 short course, participation in 4 scientific sessions, and the convening of 1 dedicated session on scalable and reproducible workflows for Earth System Sciences.

Throughout the week, project members presented work spanning atmospheric modelling, FAIR data infrastructures, scalable workflows, GPU acceleration, model performance optimisation and large-scale data management for climate and weather simulations.

One of the highlights of the week was the short course “Data compression and reduction for Earth System Sciences datasets in practice”, which attracted strong interest from attendees working with increasingly large and complex simulation datasets. The session explored practical approaches to reducing storage requirements and improving data handling efficiency while maintaining scientific usability, opening discussions around sustainable data management strategies for next-generation Earth system simulations.



Another major focus of the event was the ESiWACE3 booth, which became a meeting point for researchers, developers and infrastructure providers across the Earth system modelling community. Throughout the week, many attendees visited the booth to learn more about the project's tools, services and activities, with particular interest in the Data Compression Lab and the different HPC solutions developed within the project.

In addition to the scientific programme, the booth hosted a series of daily “Meet the Experts” sessions covering:

- Earth System Applications
- Services & Success Stories
- Tools
- Data Compression

These informal discussions created valuable opportunities to exchange experiences, answer technical questions and showcase how ESIWACE3 supports researchers working with climate and weather simulations.



The event also provided an excellent opportunity to strengthen connections with the wider Earth system modelling and HPC community, fostering new collaborations and networking with researchers, infrastructure centres and service providers working at the intersection of climate science, computation and data-intensive workflows.

We would like to thank everyone who attended our sessions, visited the booth and joined the discussions throughout the week. See you at the next EGU!

Events

External events

External events in which ESIWACE3 has participated since the last issue of the ESIWACE Newsletter:

- EuroHPC Users Day, 30 Sep-1 Oct 2025, Copenhagen
- FDO F2F Meeting, 22 and 23 October, 2025, Hamburg, Germany
- 2nd Workshop on Correctness and Reproducibility for Earth System Software, 5-7 November 2025, Boulder, CO
- EGU26, 4-8 May 2026, Vienna, Austria

News from the neighbours

Upcoming conferences and events

- [ISC High Performance](#), 22-26 June 2026, Hamburg, Germany.
- [EuroHPC Users Day](#), 22-24 September 2026, Dublin, Ireland

Training events



ECMWF

4th ESIWACE3 hackathon: Data compression

Exploring scalable compression methods for
high-volume simulation data

**Bonn, Germany
15-17 September**

Registration:

original safe compression ~25x excessive compression ~10,000x

Co-funded by the European Union

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esiwace


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3RD ESIWACE3 HACKATHON

Porting Earth System Models to
the First EuroHPC Exascale System
(JUPITER)

 Jülich Supercomputing
Centre Jülich (Germany)
Hybrid format

 20-22 October 2026

