

## Contents

- Register for training in November!
- ICON-Land workshop in Jena
- Save the date community workshop
- Training materials
- Register your components
- Sprint status

## Training seats still available!

We would like to draw your attention to an upcoming technical training in November, where seats are still available. This workshop will cover Performance Analysis and GPU Programming, including key topics such as CUDA, OpenACC, OpenMP, and Kokkos.

The training will take place on **November 5-6, 2024, at FZ Jülich**. It's an excellent opportunity to deepen your skills in performance optimization and parallel computing techniques.

Please note that the **registration deadline is October 22**, so be sure to sign up soon. You can find more details about the [agenda](#) and [register here](#).

## ICON-Land workshop in Jena

We are pleased to announce the ICON-Land Workshop, which is part of the [GINKGO workshop series](#) and will be held from November 27-29, 2024, at the MPI for Biogeochemistry in Jena. This workshop brings together scientists working on various aspects of ICON-Land, with a focus on scientific and technical challenges in land modeling.

For more details, please visit [the event page](#).

## Save the date: natESM community workshop 2025

We are thrilled to invite you to our [Community Workshop](#), taking place on **February 18-19, 2025**, at **Hotel Aquino** in Berlin. This workshop is the key event of the year for the natESM community, where all members come together to share, learn, and shape the future of Earth system modeling.

The workshop will feature presentations of the results from the sprints conducted over the past year, as well as discussions on current and future challenges. It's a unique opportunity to reflect on past achievements, address present developments, and set the course for the future of the natESM initiative.

More details will follow soon, but for now, **please mark your calendars!**

## Training materials now online

In July, we hosted two technical training sessions that were well-received by the community. All the materials and exercises from these sessions are now available online. Whether you attended or couldn't make it, you can now access the content at the following links:

1. Training on [coupling via ComIn and YAC](#)
2. Training on [GPU programming and OpenACC technologies](#)

## Register your components

We encourage you to continue registering your components in our [system on GitLab](#). This is essential for keeping the community informed about your models, facilitating valuable collaborations. The system is always open for new entries, and your contributions are crucial for building an interactive and cohesive modeling community.

To make it easier for you, simply fill out our [Google Form](#), and we'll handle adding the details to our GitLab system for you.

# Sprint status

SPRINT TITLE	INST.	SERVICE DESCRIPTION
<b>ICON-ART</b> Finished	KIT	Analysis of ART code for GPU porting → <a href="#">Sprint report</a>
<b>ICON-mHM-YAC</b> Finished	UFZ	Online coupling mHM into ICON using YAC → <a href="#">Sprint report</a>
<b>FESOM</b> Finished	AWI	Port FESOM 2.1 to JUWELS booster and Levante-GPU → <a href="#">Sprint report</a>
<b>ParFlow</b> Finished	FZJ	Port ParFlow to AMD GPUs, Performance Analysis → <a href="#">Sprint report</a>
<b>MESSy</b> Finished	FZJ	Optimize the data transfers between host (CPU) and device (GPU) → <a href="#">Sprint report</a>
<b>ESMValTool</b> Finished	DLR-PA	Updating remaining non-lazy preprocessor functions to be memory efficient → <a href="#">Sprint report</a>
<b>HAMOCC</b> Finished	MPI-M	Concurrent HAMOCC on GPU → <a href="#">Sprint report</a>
<b>MESSy-ComIn</b> Finished	DLR-PA	Couple MESSy to ICON via the ICON Community Interface → <a href="#">Sprint report</a>
<b>LAGOOn</b> Reporting	FZJ	Develop concept and provide first implementation of Lagrangian-transport-modeling framework
<b>IQ</b> Reporting	MPI-BGC	Stepwise port of IQ code to GPUs based on established workflow followed for ICON-GPU implementation with OpenACC
<b>modLSMcoup</b> Reporting	FZJ	Develop proof-of-concept for modular coupling of land surface and implement YAC coupler in ICON-eCLM coupling
<b>CLEO</b> Reporting	MPI-M	Coupling CLEO to ICON with YAC
<b>PALM</b> Running	Uni Hannover	Porting those of the PALM modules related to urban processes (especially radiation) to GPUs
<b>MESSy-ComIn2</b> Running	DLR-PA	ComIn integration time loop
<b>PDAF2GPU</b> Running	AWI	Porting PDAF to GPUs
<b>MESSy-IMPORT</b> Waiting	FZJ	Revise the data import function of the Modular Earth Sub-model System (MESSy) for ICON/MESSy
<b>PISM-AsyncIO</b> Waiting	PIK	Resolve the issue with the I/O library for asynchronous output