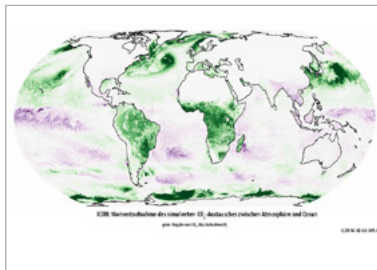


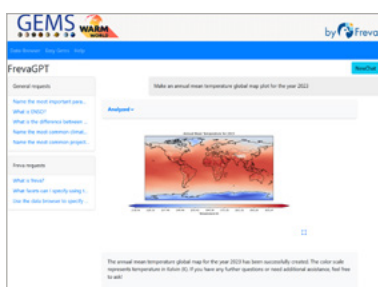
ICON simulations nominated for Gordon Bell Prize for Climate Modelling



Two projects using the ICON climate model have been nominated for the prestigious Gordon Bell Prize for Climate Modelling. A new ICON configuration simulates the entire Earth system, including the energy balance, water cycle, and carbon cycle, at a resolution of 1.25 kilometers, for the first time with a performance that enables simulations spanning several decades. A team led by the Max Planck Institute for Meteorology (MPI-M) and the German Climate Computing Center (DKRZ) developed this ICON configuration. Technical optimizations perfectly utilize the CPUs and GPUs of modern supercomputers, increasing computing throughput and reducing energy consumption to one-third compared to a purely CPU-based simulation. The configuration has already run successfully on „Alps“ at the Swiss National Supercomputing Centre and is being prepared for Europe’s largest supercomputer, „JUPITER.“ The Destination Earth (DestinE) Climate Adaptation Digital Twin has also been nominated. It uses the ICON, IFS-FESOM, and NEMO models and aims to make climate information directly accessible to users. The MPI-M and the DKRZ also contribute to DestinE with ICON. The Gordon Bell Prize, endowed with \$10,000, will be awarded in November 2025 at the supercomputing conference SC25 in St. Louis. Further information: www.dkrz.de/en/gordon-bell-preis/

Millions in funding for climate research in CLICCS II

The Cluster of Excellence CLICCS – „Climate, Climatic Change, and Society“ at University Hamburg has received funding for another seven years as part of the German Federal Government’s Excellence Strategy (Photo: Copyright UHH/C. Höhne). This was announced by the German Research Foundation (DFG) and the Science Council. CLICCS investigates the interactions between climate change and social development – that is, how we will live, work, and do business in the future. The focus is on CO₂ avoidance and climate adaptation as central measures for sustainable action. More than 200 researchers from the natural and social sciences will collaborate in CLICCS II. The DKRZ is participating as one of 12 partner institutions, alongside University Hamburg and the MPI-M. In particular, the DKRZ will support the research with its expertise in the application of Artificial Intelligence (AI) in climate research, thus facilitating, for example, multi-year numerical climate predictions based on plausible socio-economic developments. Further information: www.dkrz.de/en/cliccs2/



Project kick-off: An AI chatbot for climate science

„ChatGRT – Chat Based Geoscientific Research Transformer“, a new project for the use of AI in geosciences, started on May 1, 2025. The goal is to significantly simplify the analysis of complex research data. To this end, an intelligent chat assistant is being developed that supports scientists in data processing without requiring in-depth programming knowledge. The project is a collaboration between the DKRZ and the Helmholtz Center GFZ Potsdam and is receiving €497,000 funding from the Volkswagen Foundation over a period of two and a half years. The

FrevaGPT prototype, which has already been tested, will serve as a starting point for the further developments. A kick-off meeting is planned for September 2025, after new team members have started their work at DKRZ and GFZ. Further information: www.dkrz.de/en/chatgrt/

Visit to DKRZ: hpc4climate Summer School

As part of the hpc4climate Summer School 2025, 30 international master’s and doctoral students gained insight into the practice of high-performance computing in Earth system research through a visit to the DKRZ.

Organized by the ESIWACE3 and WarmWorld projects and supported by the DKRZ and the Max Planck Society, the summer school, held in Lauenburg from July 28 to August 7, 2025, offered numerous lectures and keynote speeches. The young researchers were able to directly apply their newly acquired knowledge in practical



exercises addressing problems in climate modeling. During the visit to the DKRZ, the participants gained insights into high-performance computing and energy efficiency, focusing on the current HPC system Levante, as well as the institution's history and current climate simulations. A tour to the computing halls completed the visit. Further information: www.dkrz.de/en/hpc4climate-summerschool/

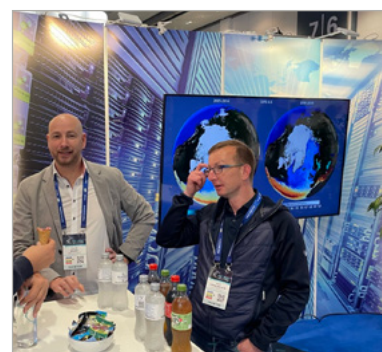


ICON training by natESM, DWD, and KIT at the DKRZ

From July 21 to 25, 2025, a technical training course on the weather and climate model ICON took place at the DKRZ in Hamburg. The event was organized by the team of the natESM project together with the German Meteorological Service (DWD) and the Karlsruhe Institute of Technology (KIT). The focus was on the ICON model from DWD/MPI-M, the ICON-ART chemistry model, the ComIn interface, and the model coupler YAC developed at the DKRZ. Technical presentations on topics such as physical processes in the atmosphere, radiation, and microphysics were supplemented by interactive exercises that deepened the participants' theoretical knowledge in a practical way. Around 35 scientists, students, and PhD students from research institutions worldwide took advantage of the opportunity to receive training in working with ICON. The goal of the natESM project, led by DKRZ, is to support the German Earth system modeling community in optimizing climate models for future supercomputers. Further information: www.dkrz.de/en/icon-training2025/

ISC25: HPC community gathered in Hamburg

During this year's International Supercomputing Conference (ISC25), around 3,500 HPC experts from academia, industry, and research met in Hamburg. Under the motto „Connecting the dots,” they discussed current developments in HPC, AI, data analytics, quantum computing, and related technologies from June 10 to 13, 2025. Accompanying the conference, 195 companies and research institutions presented their work at the exhibition. The DKRZ showed current climate simulations at the booth of the Gauß Alliance, and DKRZ visualizer Michael Böttinger participated in a sofa talk organized by the National High Performance Computing Alliance (NHR). For the Student Cluster Competition, the DKRZ once again compiled climate modeling tasks, provided computing resources, and supported the jury.



The new Top 500 list of the world's fastest supercomputers was published at ISC25: The top three spots continue to be occupied by US exascale systems, followed by Europe's and Germany's fastest supercomputer, JUPITER from Jülich. The DKRZ system is on a recognizable rank 140 after four years of operation. This places Levante among the eleven most powerful systems in Germany. Further information: www.dkrz.de/en/isc25/

StuMeTa 2025: More than 200 students of Meteorology met in Hamburg



The Meteorology Student Conference (StuMeTa) took place in Hamburg from May 28 to June 1, 2025. Over 200 students from Germany, Austria, and Switzerland came together to discuss current research topics and network. The conference offered a diverse program of lectures, workshops, excursions, and also offered opportunities for leisure activities and networking. The focus was on cross-location dialogue among early-career scientists. Hamburg researchers presented contributions on topics including tropical clouds, long-term measurements at the Hamburg weather mast, and the use of AI in climate research. Dr. Christopher Kadow, head of the department Data Analysis at DKRZ, demonstrated in his presentation how AI methods – for example, image reconstruction – can also be used to reconstruct missing climate and weather data (Photo: Copyright K. Rabe von Kühlewein). A workshop offered approximately 25 participants the opportunity to explore the DKRZ during a guided tour to the computing hall. Further information: www.dkrz.de/en/stumeta2025-en/

On our own account: Open job offers at DKRZ

Do you want to join the DKRZ team – we are looking forward to your application:

- [IT Systemadministrator focusing on network & security \(German only\)](#)

You are also welcome to send us your unsolicited application using our [webform](#). General information about vacancies and working conditions at DKRZ:

www.dkrz.de/en/about-en/vacancies/

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