Project: **1088**
Project title: **DKRZ_MIP_Pool_Analysis**
Principal investigator: **Stephan Kindermann**
Report period: **2023-11-01 to 2024-10-31**

The DKRZ_MIP_Pool_Analysis project supported (smaller scale) data analysis activities closely related to the exploration of existing DKRZ data collections (accessible via /pool/data) with specific focus on the CMIP6 (and CORDEX) collections stored as part of the DKRZ data project ik1017.

In the reporting period individual users and research teams with no pre-existing project allocation at DKRZ were enabled to access the DKRZ pool and perform small scale data analysis near to the data. This effort is coordinated at European level with similar efforts at IPSL (France), STFC (UK) and CMCC (Italy) to provide coordinated European support for CMIP related data analysis activities. Coordination started as part of the IS-ENES3 project which ended in April 2023 and now ENES research infrastructure (ENES RI) related service activities are coordinated as part of the ENES data task force and will be coordinated in the future based on a legal entity for the ENES RI which is currently being finalized.

Individual users were supported with a light weight (short term, small compute profile) access to analysis capabilities mostly via the DKRZ jupyter-hub installation (see https://is.enes.org/sdm-climate-analytics-data/). These users only need to pass a lightweight registration process and are reviewed and selected locally at DKRZ.

In the reporting period about 17 people registered for the service and 15 accounts were used for training and workshop activities. Overall, around 3000 node hours were used (allocation was 5700 node hours). Thus usage decreased a bit during this reporting period, mainly because the dedicated user support activity funded as part of the European IS-ENES3 project ended last year.

As part of this effort a collection of support material (e.g. jupyter notebooks) was enriched, updated and made publicly available as part of the DKRZ documentation and the IS-ENES github repo.

In summary this project proved very useful as a light-weight possibility to support users and user-groups wanting to access the DKRZ CMIP data pool (especially the CMIP6 data collection) to generate derived data products without the need to download huge amounts of data. The project also supported training events where this application scenario was in the focus. The required processing allocation will be higher in the follow up proposal, because two European projects started in 2024 which will support European climate model data access and processing (EXPECT and IRISCC, see allocation proposal for the 2025 allocation period). These new activities will especially support interdisciplinary European scientists in using climate model data and help to integrate the DKRZ data infrastructure in European research infrastructures.