

STAC for federated data access to high-volume ESM datasets in preparation for Exascale

Contemporary earth system models (ESM) perform simulations at kilometer scale resolution at various HPC centers. The data from these simulations aid in research and policy making. Hence the design of the data access system for a federated setup should consider the data, analysis tools and computing resources at each center. Also for efficient discoverability, the data management at each center should consider the technicalities and usage patterns of the data and the storage constraints.

Spatial Temporal Asset Catalogs (STAC) facilitate the data discoverability based on the geographic location and time. In the Warmworld project we develop a federated data access system for DKRZ and JSC centers, using STAC as the frontend and satisfying user requirements. We explain how the aforementioned factors have been addressed.

I want to give a Lightning Talk

yes

Authors: MODALI, Kameswar Rao (Deutsches Klimarechenzentrum(DKRZ)); Dr PETERS-VON GEHLEN, Karsten (Deutsches Klimarechenzentrum(DKRZ))

Presenter: MODALI, Kameswar Rao (Deutsches Klimarechenzentrum(DKRZ))

Session Classification: Poster Session