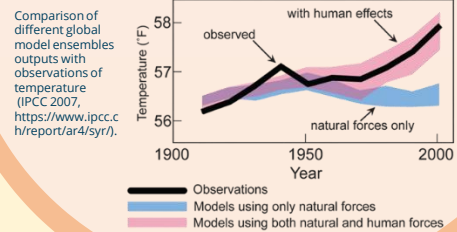


Challenge

Public authorities like the German Weather Service (Deutscher Wetterdienst DWD) collect observational data. However, the **datasets are not easily accessible** for all researchers. Furthermore, they are **not stored in standard formats** common to the climate modelling community.

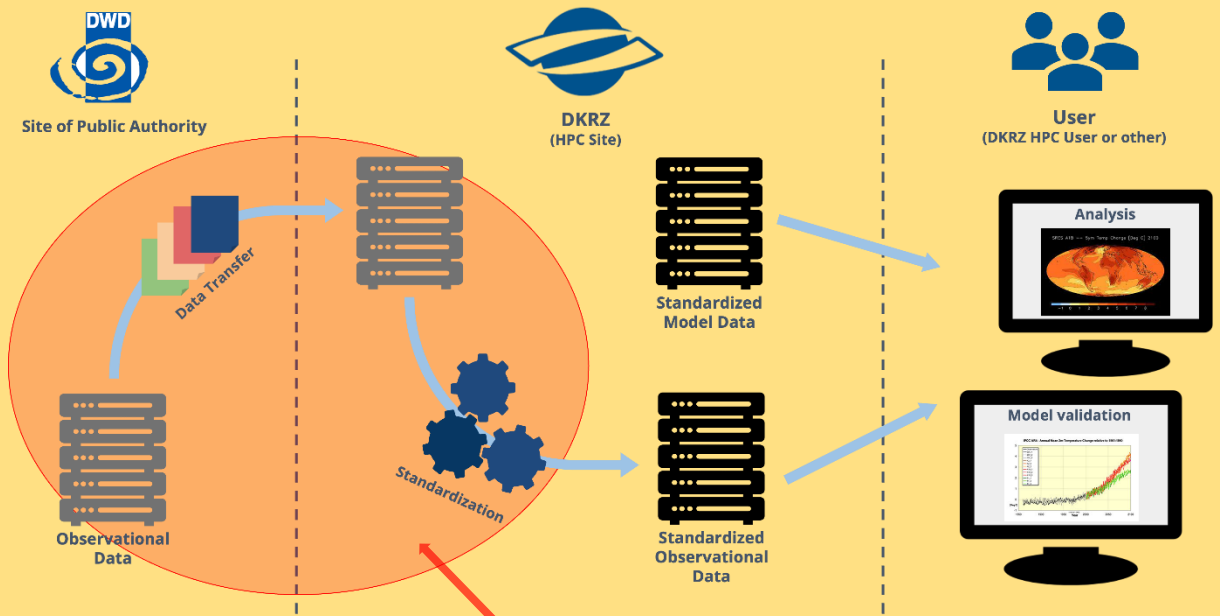
Background

In climate modelling **observational data is needed to assess the quality of the model results** and to tune parameters of the models. Thus, **access to observational data is important for many climate researchers.**



NFDI4Earth Pilot OcMOD –

Preparation of the Regional Reanalysis Dataset COSMO-REA6 for Climate Research



The goal of the pilot is to supersede the data transfer and standardization steps for a first dataset.

Solution

OcMOD – Observations closer to Model Data

The pilot takes observational data closer to the models, i.e., **enables the easy use of those valuable datasets at Levante at DKRZ.**

The data are standardized via an automatic workflow and then stored in the widely used data portals **ESGF** (Earth System Grid Federation) and **WDCC** (World Data Center for Climate) with a DOI.

Necessary tasks:

- Collaboration with the public authority DWD (available data, usage licenses)
- Selection of most relevant scientific parameters of the regional reanalysis dataset COSMO-REA6 with involvement of the research community
- Adoption and adjustment of metadata standard
- Standardization workflow for automatic transformation
- Documentation of entire workflow as a blueprint for the preparation and publication of further observational datasets