



Integrating data on radiative forcing from Research Infrastructures for Climate Modelling

Werner Leo Kutsch

Integrated Carbon Observation System, Headoffice, Helsinki, Finland (werner.kutsch@helsinki.fi)

The interoperability between Observational and Climate Modeling Environmental Research Infrastructures will be further developed in the framework of the European Open Science Cloud. The scientific focus will be on dynamics of greenhouse gases, aerosols and clouds and their role in radiative forcing. The technical focus will be on:

- improvement of data integration services based on metadata ontologies,
- model-data integration by use of HPC,
- innovative services to compile and compare model output from different sources, especially on semi-automatic spatiotemporal scale conversion.

The capacity requirements to connect the (relatively) heterogeneous in-situ data systems from ICOS and ACTRIS to the IS-ENES2 climate data systems will be estimated. The aim is to provide two-way automated interactivity, i.e. climate model data users can get relevant (climatological or specific-time) observations, and the in-situ data users can access to relevant climate model data sets.