



C3Grid: Benefits for scientists

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The amount of data in climate and earth system science increased dramatically in the last few years. Data resulting from observations or modelling studies are distributed over many archives and databases. Essential advances in understanding the earth system is expected from combination all these data collections. Linking the distributed data collections is a challenging task, because data are highly heterogeneous with respect to access mechanisms as well as in their corresponding descriptions (metadata) in schema and extent. This makes collaborations between working groups and institutions difficult and retards scientific work.

The project „Collaborative Climate Community Data and Processing Grid – C3Grid“ meets this challenge and aims at linking distributed data archives in several German institutions. The architecture is based on standard grid middleware and specific components to regard the requirements of scientific users in climate science. The implemented infrastructure provides tools for effective data discovery, data transfer and processing. It will be demonstrated how C3Grid can help the scientist to execute typical workflows in a distributed environment.