



Competence Center for Earth & Environmental Data (KomFor)

M. Diepenbroek (1), S. Bernonville (2), R. Bertelmann (3), M. Bittner (2), J. Brase (4), H. Grobe (5), H. Hoeck (6), J. Klump (3), M. Lautenschlager (6), U. Schindler (1), I. Sens (4), S. Peters (4), F. Toussaint (6), D. Ulbricht (3), and F. Ziedorn (4)

(1) University Bremen, MARUM, PANGAEA, Bremen, Germany (mdiepenbroek@pangaea.de), (2) German Aerospace Center, DLR, Oberpfaffenhofen, Germany, (3) German Research Centre for Geosciences, GFZ, Potsdam, Germany, (4) German National Library of Science and Technology, TIB, Hannover, Germany, (5) Alfred Wegener Institute for Polar and Marine Research, AWI, Bremerhaven, Germany, (6) German Climate Computing Center, DKRZ, Hamburg, Germany

The Competence Center is planned as link between Geoscientific facilities and an existing archive network for earth and environmental data in Germany. KomFor generally aims at improving the overall availability and quality of data in a sustainable way. Practically from the users view the project will create a unique instance which accompanies scientific facilities, projects, and groups in all questions of data management – from the planning phase via data production, QA/QC, registration and long term storage to publication of data; the latter also including science publishers. In addition KomFor will supply systems and interfaces for accessing data comprising a data portal, services which allow downloading data for analysis and visualization tools (added value services), components for cross-referencing data and science articles as well as a broker function into superior global networks.

KomFor is based on ICSU World Data Centers and Services located in Germany, which are collaborating in a national cluster since 2003 – the WDC Climate (WDC-C, DKRZ), WDC for Remote Sensing (WDC-RSAT, DLR), the German Research Centre for Geosciences (GfZ), and the Data Publisher for Earth & Environmental Science (PANGAEA, AWI/Marum). The cluster is complemented by the German National Library of Science and Technology (TIB). The consortium is well embedded into the international environment (WDS, IPCC, ESA, NASA, CEOS, GMES, GEOSS, INSPIRE, ESFRI, WMO, IODP, ICDP, IOC etc.) and is engaged since years in the development of standards as well as organizational structures and infrastructures for research data. Amongst others the consortium has implemented a registry service for scientific data which meanwhile is supported by an international association of libraries and is used worldwide (DataCite). A milestone was also the implementation of a web service for dynamically cross-referencing science articles with related data, initially used by Elsevier and now increasingly used by further publishers.