

PANGAEA® - Long-term archiving and publication of earth science data

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PANGAEA - Data Publisher for Earth & Environmental Science (www.pangaea.de) is an Open Access data-library aimed at archiving, publishing and distributing georeferenced data from earth system research. The development of the system started with the beginning of the Internet and since then offers data curation services to national and international projects, institutes and individual scientists.

Observational and analytical data files are stored with metadata in a relational database. Each data set includes a bibliographic citation and is persistently identified using a Digital Object Identifier (DOI). Data can be archived as a supplement related to an article or as an independent citable data-publication. The content is distributed through library catalogs, search engines and portals by web services. The retrieval in 350 000 data sets, consisting of 9 billion data points is enabled by a search engine. A data warehouse allows the compilation of multiple studies, datasets and sources into new collections, a favourite tool for modeling and synthesis.

PANGAEA is a recommended repository for supplements in some hundred journals related to earth system research. Elsevier was the first publisher providing an automatic data-integration and visualization functionality that is shown next to the article on ScienceDirect.

PANGAEA provides important collections from international Antarctic and Arctic research programs, e.g. the Cape Roberts Project, ANDRILL, EPICA project, and data of the first and last International Polar Years (IPY 1882-1883 and 2007-2008). Additionally, the full data amount of combined high and low latitude research projects, e.g. JGOFS, WOCE, DSDP/ODP/IODP and German expeditions are archived and published.

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