

## **PANGAEA® - more than 20 years serving the earth science community with data archiving and publication**

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PANGAEA - Data Publisher for Earth & Environmental Science ([www.pangaea.de](http://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. The World Data Center PANGAEA is member of the World Data System (WDS) of the International Council for Science (ICSU).

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 are archived as a supplement related to an article or as an independent citable data-publication.

PANGAEA actually provides more than 365 000 data set, consisting of >11 billion data points, including collections from national and international research programs, e.g., JGOFS, WOCE, DSDP/ODP/IODP, RRM-C-BSRN, Cape Roberts Project, ANDRILL. The content is distributed via its own search engine, and through library catalogs, search engines and portals by web services. A data warehouse allows the compilation and reuse of multiple studies, datasets and sources into new collections, a favorite 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.

The data publishing workflow of Pangaea is well established, any author can submit data via a ticket system. An editor then prepares the submitted data for import including an editorial review and check for completeness of metadata and consistency. After the import and formatting the supplement, the editor sends the DOI to the author for a proofread. Communication during the publication process is fully documented and archived. The data-DOI can be used by the author in an article to point to its data supplement.

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