

# Details

# PANGAEA - Data Publisher for Earth & Environmental Science (PANGAEA)

PANGAEA - Data Publisher for Earth & Environmental Sciences has an almost 30-year history as an open-access library for archiving, publishing, and disseminating georeferenced data from the Earth, environmental, and biodiversity sciences. Originally evolving from a database for sediment cores, it is operated as a joint facility of the Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research (AWI) and the Center for Marine Environmental Sciences (MARUM) at the University of Bremen. PANGAEA holds a mandate from the World Meteorological Organization (WMO) and is accredited as a World Radiation Monitoring Center (WRMC). It was further accredited as a World Data Center by the International Council for Science (ICS) in 2001 and has been certified with the Core Trust Seal since 2019. The successful cooperation between PANGAEA and the publishing industry along with the correspondent technical implementation enables the cross-referencing of scientific publications and datasets archived as supplements to these publications. PANGAEA is the recommended data repository of numerous international scientific journals.

Address:	Mary-Astell-Strasse 2 28359 Bremen
	Bremen
	Deutschland
	To website

## **Host Institution**

MARUM, Zentrum für Marine Umweltwissenschaften der Universität Bremen Leobener Str. 8 28359 Bremen Bremen Deutschland https://www.marum.de Alfred-Wegener-Institut, Helmholtz-Zentrum für Polar- und Meeresforschung Am Handelshafen 12 27570 Bremerhaven Bremen Deutschland https://www.awi.de

## **Scientific Domain**

### **Primary Subjects:**

- Biology
- Geosciences (including Geography)

#### Secondary Subjects:

- · Agriculture, Forestry, Horticulture and Veterinary Medicine
- Chemistry
- Physics

## Category

Research data repositories

## **Scientific Services**

PANGAEA provides access to over 400,000 datasets containing over 20 billion individual measurements, including those collected through over 600 national or international projects. Each published dataset can be cited with a specific data citation and an associated universally unique Digital Object Identifier (DOI) to cross-link to related resources such as manuscripts and data. A broad spectrum of contextual information ("metadata"), explaining the where, how, when, and why of a measurement is given. Additionally, the methods and devices used for sampling and analysis as well as references of related literature and external resources are provided. All data and metadata is compiled in close collaboration between the scientists and trained field experts acting as data editors. Both, data and metadata

are checked for completeness and plausibility, ensuring high quality standards according to the FAIR data principles. The integration of multiple internationally endorsed persistent identifier systems (PIDs) at PANGAEA, such as the Open Researcher and Contributor ID (ORCID) for the unambiguous identification of individual researchers, the Research Organization Registry (ROR) for institutional affiliation, and PIDs for projects (e.g. CORDIS) and research funders (e.g. Crossref Funder registry), as well as community-specific PIDs such as the International Geosample Number (IGSN) and the World Register of Marine Species (WORMS) and the Integrated Taxonomic Information System (ITIS) for organisms, complement the range of interconnectivity options for individual scientific resources and information. With this PANGAEA can be seamlessly integrated in a sustainable and future-oriented data management.

## **Scientific Equipment**

### **Keywords**

- Research Data Management
- FAIR Data
- Open Data
- Data publisher
- Data citation
- Earth Sciences
- Environmental Sciences
- DOI
- Data Curation
- Data repository
- Biodiversity
- Standards (ISO, OAI-PMH, schema.org)

### **Networks**

National Research Data Infrastructure (NFDI) https://www.nfdi.de

World Meteorological Organization (WMO) https://public.wmo.int

World Data Center by the International Council for Science (ICS) <a href="https://www.worlddatasystem.org/">https://www.worlddatasystem.org/</a>

### Users per annum

Internal Users: wird nicht erfasst External Users in total: >250.000 unique users auf Webseite plus Webservices (nicht erfasst) External Users: 25.000 External Users in the EU: 100.000 External Users outside of EU: 150.000