

Data archiving, sharing and publishing

The collage features several overlapping screenshots of research data services. On the left, the EnMAP website shows a satellite image and the text 'EnMAP Mission for Earth Observation'. In the center, a PDF document titled 'Bias corrected GCM input data for ISIMIP Fast Track' is displayed, showing an abstract and data description. To the right, a GFZ data page is visible, listing 'Supplement to: Monitoring and Assessment Report 2014' and 'Data Files' with download links. At the bottom, a map of Europe is partially visible, overlaid with a data visualization.

re3data.org
REGISTRY OF RESEARCH DATA REPOSITORIES

GFZ Data Services

This block contains the PANGAEA logo, which includes a globe icon and the text 'PANGAEA. Data'. Below it is the zalf logo with the text 'Open Research Data'. To the right, a 'Spatial Filter' interface is shown with a map of Europe and a compass rose.

Kirsten Elger

GFZ Data Services,

GFZ German Research Centre for Geosciences, Potsdam

Things to keep in mind when sharing data

A Painful (but True-to-life) Look at Data Availability and Reuse



Open Research Data – an international request



G8 UK
UNITED KINGDOM 2013

G8 OPEN DATA CHARTER



H2020 Programme

Guidelines on
FAIR Data Management in Horizon 2020



Government of Canada / Gouvernement du Canada

Jobs ▾ Immigration ▾ Travel ▾ Business ▾ Benefits ▾ He

[Home](#) → [Open Government](#) → [About Open Government](#) → [G8 Open Data Charter – Canada's Action Plan](#)

G8 Open Data Charter – Canada's Action Plan

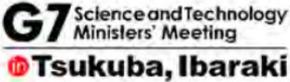


National Science Foundation
WHERE DISCOVERIES BEGIN

HOME Research Areas Funding Awards

National Science Foundation (NSF) Home

About Open Data at NSF



G7 Science and Technology Ministers' Meeting
Tsukuba, Ibaraki



G7 2016
ISE-SHIMO SUMMIT



DFG Deutsche Forschungsgemeinschaft



Handling of Research Data

Tsukuba Communiqué
G7 Science and Technology Ministers' Meeting in Tsukuba, Ibaraki
15-17 May 2016

.....and many more

Why sharing data?

Sharing research data...

- encourages **scientific enquiry and** debate
- promotes innovation and **potential new data uses**
- leads to **new collaborations** between data users and data creators
- maximises **transparency** and accountability
- enables **scrutiny** of research findings
- encourages the improvement and **validation** of research methods
- **reduces the cost** of duplicating data collection
- increases the **impact** and **visibility** of research
- provides **credit** to the researcher as a research output in its own right
- provides great resources for education and training

(source: UK Data Archive, <http://www.data-archive.ac.uk/create-manage/planning-for-sharing/why-share-data>)

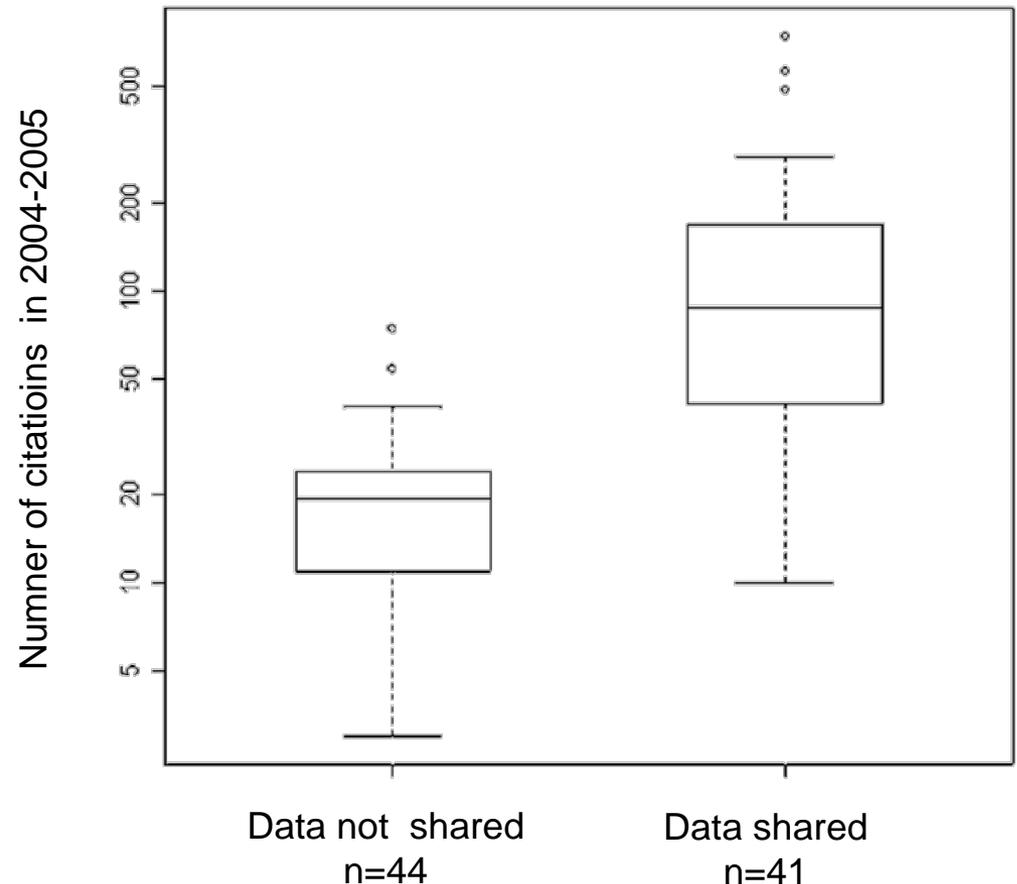
Sharing Detailed Research Data Is Associated with Increased Citation Rate

Heather A. Piwowar*, Roger S. Day, Douglas B. Fridsma

Department of Biomedical Informatics, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania, United States of America

*“We examined the citation history of 85 cancer microarray clinical trial publications with respect to the availability of their data. The 48% of trials with publicly available microarray data received 85% of the aggregate citations. **Publicly available data was significantly ($p = 0.006$) associated with a 69% increase in citations, independently of journal impact factor, date of publication, and author country of origin using linear regression.**”*

doi:10.1371/journal.pone.0000308

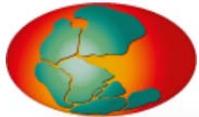


Best Practice: Data Publication

Publication of datasets as individual publications (with assigned persistent Identifier; DOI) through data repositories

re3data.org
REGISTRY OF RESEARCH DATA REPOSITORIES

GFZ Data Services



PANGAEA.

Data Publisher for Earth and Environmental Sciences

Spatial Filter



Open Research Data



Data Repositories:

- permanent archives for research data
- Open Access
- disciplinary, institutional, general
- persistent identifier (ideally DOI)
- re3data.org helps to find repositories

Best Practice: Data Publication

Publication of datasets as individual publications (with assigned persistent Identifier; DOI) through data repositories

- **Findable:** integration of standardised metadata in external data portals (e.g. DataCite, EUDAT)
- **Accessible:** persistent data storage and access guaranteed by the publisher (= data repository)
- **Documented:** with metadata for discovery and reuse
- **Citable:** DOI-referenced datasets are citable just as journal articles (→ credit for the researcher)

Coalition on Publishing Data in the Earth and Space Sciences

COPDESS

GOAL

**OPEN DATA in the EARTH
and SPACE SCIENCES**

STATEMENT OF COMMITMENT

SITUATION TODAY

1. Scholarly publication is a key high value entry point in making data available, open, discoverable, and usable.
2. Unfortunately, the vast majority of data submitted along with publications are in formats and forms of storage that makes discovery and reuse difficult or impossible.

42 SIGNATURES (October 2016)

COPDESS



www.copdess.org/statementofcommitment

Coalition on Publishing Data in the Earth and Space Sciences

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1. Scholarly publication is a key high value entry point in making data available, open, discoverable, and usable.
2. Unfortunately, the vast majority of data submitted along with publications are in formats and forms of storage that makes discovery and reuse difficult or impossible.

STATEMENT OF COMMITMENT

- To promote metadata information and domain standards, [...], to help simplify and standardize deposition and reuse.
- To promote referencing of data sets using the **Joint Declaration of Data Citation Principles**, in which **citations of data sets should be included within reference lists**.
- To include in research papers concise statements indicating where data reside and **clarifying availability**.
- To promote and **implement links to data sets in publications** and corresponding links to journals in data facilities via persistent identifiers.

(January 2015)

New Journal Policies 2016

SPRINGER NATURE

RESEARCH DATA POLICY:

“The journal encourages authors, where possible and applicable, to **deposit data** that support the findings of their research **in a public repository** [...] **Datasets that are assigned** digital object identifiers (DOIs) by a data repository **may be cited in the reference list.**”



Copernicus Publications recommends **depositing data** that correspond to journal articles **in** reliable (**public**) **data repositories**, assigning digital object identifiers, and properly **citing data sets as individual contributions.**

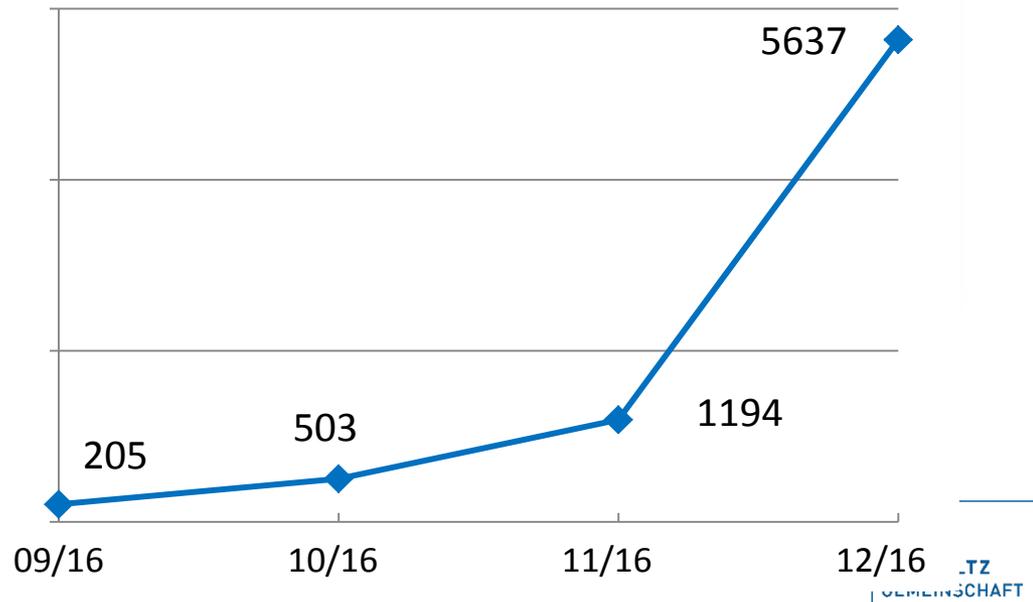
Tracking Data Publications



DataCite Statistics

Datacentre	DOI Registrations				Metadata			
	Total	This Year	Last 30 Days	Last 7 Days	Searchable	Hidden	Missing	Ratio
TIB.ADLNET - Romania ADL Association	1 193	0	0	0	998	195	0	100%
TIB.AIP - Leibniz-Institut für Astrophysik Potsdam (AIP)	85 288	0	0	0	85 288	0	0	100%
TIB.AMA - AMA Service GmbH	1 893	0	0	0	1 889	4	0	100%
TIB.ASTONE - Institut für Wirtschaftsinformatik, Westfälische Wilhelms-Universität Münster	213	0	0	0	213	0	0	100%
TIB.AWI - Alfred-Wegener-Institut								
TIB.BAFG - Bundesanstalt für Gewässerkunde								
TIB.BAUA-DOI - Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (BAuA)								
TIB.BAW - Bundesanstalt für Wasserbau								
TIB.BEILST - Beilstein-Institut zur Förderung der Chemischen Wissenschaften								
TIB.BIKF - Biodiversity and Climate Research Centre								
TIB.CASIMIR - Stiftung Schloss Friedenstein, Gotha								
TIB.CTT - Cellular Therapy and Transplantation								
TIB.DAGST - Dagstuhl								
TIB.DESY - DESY - Deutsches Elektronen-Synchrotron								

DOI hits for GFZ Datasets of the World Stress Map



What do I need for a data publication/ What is important when I want to share my data?

1. Data
2. Metadata

Metadata and Metadata

1. Structural metadata (disciplinary data description)

Header of sensor data

```
ENVI
description = {
  Create New File Result [Tue Jan 05 17:34:54 2016]}
samples = 70
lines = 393
bands = 1
header offset = 0
file type = ENVI Classification
data type = 1
interleave = bsq
sensor type = Unknown
classes = 62
class lookup = {
  0, 0, 0, 20, 75, 0, 40, 105, 10, 113, 160,
188, 185, 115, 220, 185, 255, 205, 25, 255, 165, 20,
225, 25, 0, 225, 25, 0, 225, 25, 0, 250, 150,
250, 150, 0, 250, 150, 0, 230, 120, 0, 230, 120,
25, 85, 245, 40, 145, 255, 40, 145, 255, 40, 145,
40, 145, 255, 40, 145, 255, 130, 210, 255, 130, 210, 2
250, 160, 185, 255, 195, 195, 255, 195, 195, 145, 25,
218, 112, 214, 218, 112, 214, 218, 112, 214, 30, 30, 18
255, 210, 0, 160, 215, 50, 160, 215, 50, 160, 215,
176, 131, 255, 100, 40, 180, 255, 255, 75, 255, 255,
225, 205, 170, 225, 205, 170, 147, 115, 48, 147, 115, 4
147, 115, 48, 80, 0, 115, 80, 0, 115, 180, 180, 180
180, 180, 180, 60, 60, 60}
class names = {
Not_Classified, calcite_abundant, calcite, calcite.7+muscovite
calcite.8+montmorillonite_Ca.2, calcite.8+montmorillonite_Mg
carbonate_Fe_bearing, dolomite, dolomite.5+montmorillonite
dolomite.25+calcite.25+mont_Na.5, epidote, chlorite_lowFe,
chlorite+muscovite, muscovite_lowAl, muscovite_medAl, muscovite
muscovite_Fe-rich, illite, illite_gds4, kaolinite_wx1, kaolinite_px1,
```

ReadMe

ds_000011593_mn_ReadMe Editor

Datei Bearbeiten Format Ansicht ?

AVERTISSEMENT / WARNING

Même si des efforts sont déployés pour assurer la qualité des données et des métadonnées, nous ne pouvons garantir que les données et les métadonnées sont exactes. Bien que des efforts sont déployés pour assurer la qualité des données et des métadonnées, nous ne pouvons garantir que les données et les métadonnées sont exactes.

Although efforts are made to ensure the quality of the data and metadata, we cannot guarantee that they contain accurate information. Although efforts are made to ensure the quality of the data and metadata, we cannot guarantee that they contain accurate information.

AUTEUR(S) / AUTHOR(S)

Centre d'études nordiques

RÉSUMÉ / SUMMARY

Les données de ce numéro de Nordica

The datasets in this issue of Nordica

CITATION DES DONNÉES / DATA CITATION

CEN 2014. Données environnementales

CEN 2014. Environmental data from

SITE(S)

Nom / Name

5 Ellesmere Parks Canada (ELL)

DESCRIPTION

SITE: Ellesmere Parks Canada (ELL) Profondeurs des / températures

MEASURE(S) / MEASUREMENT(S)

TYPE: Température moyenne

Metadata of the Data Tables

Sites

Column Name	Data Type	Description	Validation Text	Unit
EXPEDITION	Numeric	expedition number	integer value	#
SITE	Numeric	site number	integer value	#
NAME	Text	site name or locality	text string of max. 40 characters	#
PLATFORM	Text	platform identifier, C=Chikyuy, J=Joides, M=Mission Specific, R=Drill Rig	text string of max. 1 character	#
LATITUDE_DEG	Integer	decimal degrees of site latitude (latitude of hole 'A')	integer value between 0 and 90	deg.
LATITUDE_MIN	Double	decimal minutes of site latitude (latitude of hole 'A')	real value	min.
LATITUDE_DIR	Text	direction latitude	text string of max. 1 character	#
LONGITUDE_DEG	Integer	decimal degrees of site longitude (longitude of hole 'A')	integer value between 0 and 180	deg.
LONGITUDE_MIN	Double	decimal minutes of site longitude	real value	min.
LONGITUDE_DIR	Text	direction site longitude	text string of max. 1 character	m
DATE_START	Date	date of site start	date in UTC	dd-mmm-yyyy
DATE_END	Date	date of site end	date in UTC	dd-mmm-yyyy

Metadata and Metadata

2. Metadata for data discovery: example DOI landing page

title
citation

GFZ
Helmholtz Centre
POTSDAM

GFZ GERMAN RESEARCH CENTRE
FOR GEOSCIENCES

Dataset COSC-1 operational report - Operational data sets

Cite as:
Lorenz, Henning; Rosberg, Jan-Erik; Juhlin, Christopher; Bjelm, Leif; Almqvist, Bjarne; Berthet, Théo; Conze, Ronald; Gee, David G.; Klonowska, Ivona; Pascal, Christophe; Pedersen, Karsten; Roberts, Niko; Tsang, Chinfu. (2015): COSC-1 operational report - Operational data sets. GFZ German Research Centre for Geosciences. <http://dx.doi.org/10.1594/GFZ.SODR.ICDP.5054.2015>

Data Files
This dataset contains files with restricted (R) access. You may download or apply for access at the following contacts:

- Lorenz, Henning, Department of Earth Sciences, Geophysics, henning.lorenz@gfz.gu.se
- COSC Consortium <http://cosc.icdp-online.org>

Supporting information: Lorenz, H.; Rosberg, J. E.; et al. (2015): COSC-1 operational report Explanatory remarks on the operational data sets. Deutsches GeoForschungsZentrum GFZ doi:10.2312/ICDP.2015.001

(R) All Data
Sites 2427 Bytes
Holes 15133 Bytes
Core Runs 85575 Bytes
Core Sections 300426 Bytes
Core Boxes 59763 Bytes
Core Overviews 61279327 Bytes
(R) Lithological Descriptions
(R) Sample Request
(R) Core Samples taken
Mud Samples taken 20781 Bytes
(R) Multi-Sensor Core Logging
(R) XRF logging
Borehole Measurement Campaigns 4966 Bytes
Borehole Measurement Runs 12358 Bytes
(R) Borehole Measurement Files
(R) Composite Borehole Log Plots
Drilling Time Breakdown per Day 11110 Bytes
Drilling Time Breakdown of Tasks 102353 Bytes
Drilling Technical Parameter 35538 Bytes
Used Drill Bits 2981 Bytes

License: CC BY 4.0
End of moratorium: /2017-03-01

Abstract
The Collisional Orogeny in the Scandinavian Caledonides (COSC) scientific drilling project focuses on mountain building processes in a major mid-Paleozoic orogen in western Scandinavia and its comparison with modern analogues. The transport and emplacement of subduction-related high-grade continent-ocean transition (COT) complexes onto the Baltoscandian platform and their influence on the underlying allochthons and basement will be studied in a section provided by two fully cored 2.5 km deep drill holes. This operational report concerns the first drill hole, COSC-1 (ICDP 5054-1-A), drilled from early May to late August 2014.

COSC-1 is located in the vicinity of the abandoned Fröså mine, close to the town of Åre in Jämtland, Sweden and was planned to sample a thick section of the Sveve Nappe and to penetrate its basal thrust zone into the underlying lower grade metamorphosed allochthon. Despite substantial technical problems, the drill hole reached 2502.8 m drillers' depth and nearly 100% core recovery was achieved. Surprising was the homogeneity of the Sveve Nappe rocks, the unexpected thickness of its basal thrust zone (> 500 m) and that the drill hole, therefore, did not penetrate the bottom of the thrust zone. However, lower grade metasedimentary rocks were encountered in the lowermost part of the drill hole together with tens of metres thick mylonites that are, unexpectedly, rich in large garnets.

The drill core was documented on-site and XRF scanned off-site. During various stages of the drilling, the borehole was documented by comprehensive downhole logging. This operational report provides an overview over the COSC-1 operations from drilling preparations to the sampling party and describes the available datasets and sample material.

Keywords
SOLID EARTH, ROCKS/MINERALS/CRYSTALS, geoscientific information, caledonides, COSC, deep hydrosphere, dynamics, europe, heat flow, himalaya, ICDP-2011/03, microbiology, norway, orogen, scandia, scandinavia, seismic, sweden, earth science

GCMD Science Keywords
EARTH SCIENCE > SOLID EARTH > ROCKS/MINERALS/CRYSTALS > METAMORPHIC ROCKS > METAMORPHIC ROCK FORMATION

More Metadata
iso19115: view inline / download xml
datacite: view inline / download xml
dif: view inline / download xml
esidoc: view inline / download xml

Location
Latitude: 63.4063 Longitude: 13.203057

Related Work
IsReferencedBy
Lorenz, H.; Rosberg, J. E.; et al. (2015): Operational report about phase 1 of the collisional orogeny in the scandinavian caledonides scientific drilling project (COSC-1). Deutsches GeoForschungsZentrum GFZ doi:10.2312/ICDP.2015.002

Supplement to
Lorenz, H.; Rosberg, J.-E.; et al. (2015): COSC-1 - drilling of a subduction-related allochthon in the Palaeozoic Caledonide orogen of Scandinavia. Scientific Drilling doi:10.5194/sd-19-1-2015

References

download
data files

related
work

Who did what, when
and where?

description/
abstract

Keywords

spatial
coverage

What do I need for a data publication?

1. Research data
2. Structural/ contextual metadata for data documentation and re-use
3. Metadata for data discovery (standardised, readable for humans and for machines)

→ **Digital object identifier (DOI)**

Formats for data publication (and their description)

1. Data publication as „supplementary material“ to journal articles (data description in the article, additional README or explanatory file with the dataset if required)
2. Data publication together with an article in a Data Journal
3. Standalone data publication with Data Report or “README”

Exampe 1: Data Supplements

Links to datasets

Link to original article with data description

Data Files

Vey-et-al-2016-US_2012_15.txt	44122 Bytes
Vey-et-al-2016-GNSS_2012_15.txt	4449 Bytes

License: CC BY 4.0

Abstract

We provide data of a case study from the GNSS station Wetzell, Germany (WTZR). This data set contains snow depth derived from GNSS data using reflectometry. It covers a time period from July 1, 2012 to July 1, 2015 and gives the integral snow depth over an area of about 150 by 30 m. The data are daily averages based on daily measurements from 4 different satellites. The GNSS derived snow depth was validated by observations from ultrasonic sensors (US). The detailed description of the processing, the evaluation with US and the discussion of the results is described in Vey et al. (2016). The data are provided in ASCII format with four columns:

GNSS data (file Vey-et-al-2016-GNSS_2012_15.txt): (1) year (YEAR) (2) day of the year (DOY) (3) snow depth (SD cm) from GNSS (4) accuracy, root mean square error (RMSE cm)

Ultrasonic Sensor data (file Vey-et-al-2016-US_2012_15.txt): (1) year (YEAR) (2) day of the year (DOY) (3) SD_US_pillow (cm) snow depth from the US sensor located above snow pillow (4) SD_US_SPA(cm) snow depth from the US sensor located at the snow pack analyzer

Dataset Contact

Vey, Sibylle; GFZ German Research Centre for Geosciences, Potsdam, Germany; vey(at)_gfz-potsdam.de

Keywords

Global Navigation Satellite System (GNSS), reflectometry, remote sensing, snow depth

GCMD Science Keywords

EARTH SCIENCE > CLIMATE INDICATORS > CRYOSPHERIC INDICATORS > SNOW DEPTH

More Metadata

iso19115: view inline / download xml
datacite: view inline / download xml
dif: view inline / download xml
escidoc: view inline / download

Related Work

Supplement to

Vey, Sibylle; Guntner, Andreas; Wickert, Jens; Blume, Theresa; Thoss, Heiko; Ramatschi, Markus (2016): Monitoring Snow Depth by GNSS Reflectometry in Built-up Areas: A Case Study for Wetzell, Germany. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing. 10.1109/JSTARS.2016.2516041

References

Larson, Kristine M.; Nievinski, Felipe G. (2013): GPS snow sensing: results from the EarthScope Plate Boundary Observatory. GPS Solutions. 10.1007/s10291-012-0259-7

Find More Research Data

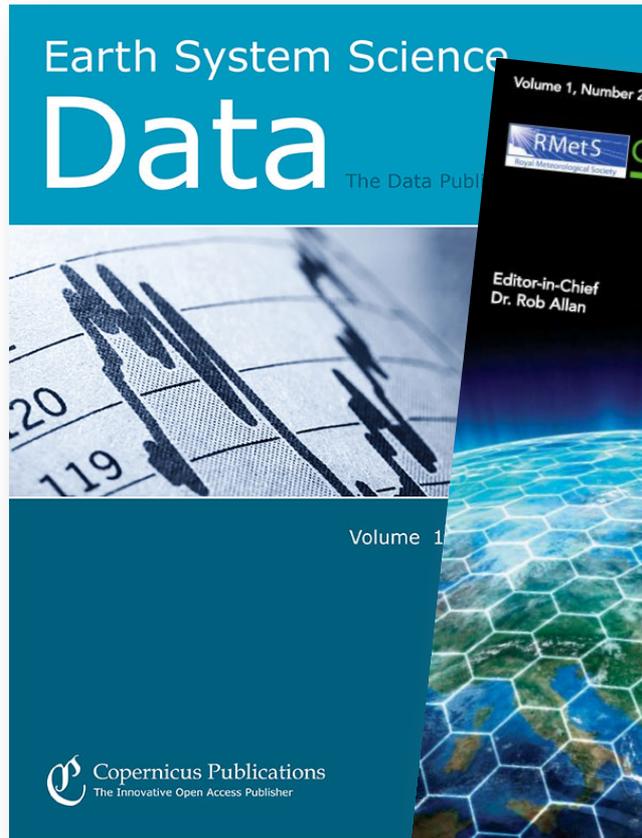
<http://bib.telegrafenberg.de/finden/datenbanken/forrsuchungsdaten/>

We recommend...

- to publish **data supplements in open access data repositories**
- synchronous to the publication of the scientific article with **cross-references between the article and the dataset**

Example 2: Data Journals

Peer-reviewed articles with the description of datasets, data collections, data infrastructures, etc.



Example 3: GFZ Data Reports

2011: first Data Report published as a new series of the traditional Scientific Technical Report series of GFZ (persistently online accessible and citable with DOI)

GFZ Data Reports:

- Flexible format – “enhanced data description”
- standardised templates for each discipline
- internal review by domain experts
- Project-specific design if required



Citing a dataset

“A data citation in a publication should resemble a bibliographic citation and be located in the publication's reference list.”
(COPERNICUS Data Policy)



Properties of granular analogue model materials: A community wide survey

M. Klinkmüller^{a,1}, G. Schreurs^{a,1}, M. Rosenau^b, H. Kemnitz^b

^a Institute of Geological Sciences, University of Bern, Baltzerstrasse 1 +3, CH-3012 Bern, Switzerland

^b Helmholtz-Zentrum Potsdam, GFZ Deutsches GeoForschungsZentrum, Telegrafenberg, D-14473 Potsdam, Germany

sented as grain size distribution curves, in which particle grain plotted against cumulative weight percentage (Fig. 2).

The original sieve data have been published open access available in Klinkmüller et al. (2016b).

References

Heilbronner, R., Keulen, N., 2006. Grain size and grain shape an. *Tectonophysics* 427, 199–216.

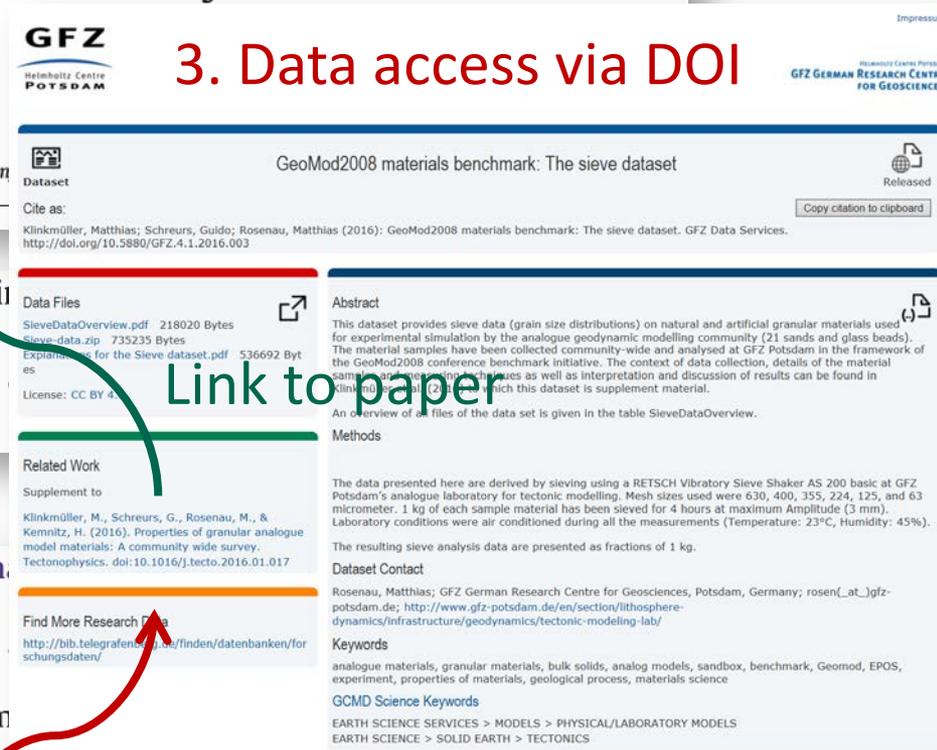
Hubbert, M.K., 1951. Mechanical basis for certain familiar geologic. *Am. Bull.* 62, 1259–1273.

Klinkmüller, M., Schreurs, G., Rosenau, M., 2016a. GeoMod2008 m The ring shear test data set. GFZ Data Services. <http://dx.doi.org/10.5880/GFZ.4.1.2016.002>.

Klinkmüller, M., Schreurs, G., Rosenau, M., 2016b. GeoMod2008 materials benchmark: The sieve data set. GFZ Data Services. <http://dx.doi.org/10.5880/GFZ.4.1.2016.003>.

Klinkmüller, M., Kemnitz, H., Schreurs, G., Rosenau, M., 2016c. GeoMod2008 materials benchmark: The SEM image data set. GFZ Data Services. <http://dx.doi.org/10.5880/GFZ.4.1.2016.004>.

3. Data access via DOI



GFZ
Helmholtz Centre
POTSDAM

GeoMod2008 materials benchmark: The sieve dataset

Released

Copy citation to clipboard

Cite as:
Klinkmüller, Matthias; Schreurs, Guido; Rosenau, Matthias (2016): GeoMod2008 materials benchmark: The sieve dataset. GFZ Data Services. <http://dx.doi.org/10.5880/GFZ.4.1.2016.003>

Data Files

SieveDataOverview.pdf 218020 Bytes

Sieve-data.zip 735235 Bytes

Explanation for the Sieve dataset.pdf 536692 Bytes

License: CC BY 4.0

Abstract

This dataset provides sieve data (grain size distributions) on natural and artificial granular materials used for experimental simulation by the analogue geodynamic modelling community (21 sands and glass beads). The material samples have been collected community-wide and analysed at GFZ Potsdam in the framework of the GeoMod2008 conference benchmark initiative. The context of data collection, details of the material samples and sieve techniques as well as interpretation and discussion of results can be found in Klinkmüller et al. (2016b), which this dataset is supplement material.

An overview of all files of the data set is given in the table SieveDataOverview.

Methods

The data presented here are derived by sieving using a RETSCH Vibratory Sieve Shaker AS 200 basic at GFZ Potsdam's analogue laboratory for tectonic modelling. Mesh sizes used were 630, 400, 355, 224, 125, and 63 micrometer. 1 kg of each sample material has been sieved for 4 hours at maximum Amplitude (3 mm). Laboratory conditions were air conditioned during all the measurements (Temperature: 23°C, Humidity: 45%).

The resulting sieve analysis data are presented as fractions of 1 kg.

Dataset Contact

Rosenau, Matthias; GFZ German Research Centre for Geosciences, Potsdam, Germany; [rosen\[at\]giz-potsdam.de](mailto:rosen[at]giz-potsdam.de); <http://www.gfz-potsdam.de/en/section/lithosphere-dynamics/infrastructure/geodynamics/tectonic-modeling-lab/>

Keywords

analogue materials, granular materials, bulk solids, analog models, sandbox, benchmark, Geomod, EOS, experiment, properties of materials, geological process, materials science

GCMD Science Keywords

EARTH SCIENCE SERVICES > MODELS > PHYSICAL/LABORATORY MODELS
EARTH SCIENCE > SOLID EARTH > TECTONICS

Link to paper

the References

Metadata Catalogue

- spatial search via map
- filter + faceted search
- basic information (title, authors, abstract)
- link to the DOI landing page

Search the Research Data Repository of GFZ Data Services below and read here how to publish data.

Search

(press ESC to close suggestions)

Andersen, Per Helge (1) - author

Elgered, Gunnar (1) - author

Elger, Kirsten (10) - contributor

46.07323062

Current Selection (Link)

geo:[46.07323062540835,0.87890625 TO 58...]



Found 275 datasets.

Datcenters

- EnMAP
- GEFON Seismic Networks
- GFZ German Research Centre for Geosciences
- GIIP Geophysical Instrument Pool Potsdam
- ICGEM International Centre for Global Earth M...
- IGETS International Geodynamics and Earth Ti...
- PIK Potsdam Institute for Climate Impact Rese...
- SDDB Scientific Drilling Database
- SFB06 and CRC06-Database
- TERENO
- WDS World Stress Map

Top Categories

- agriculture
- atmosphere
- biosphere
- climate indicators
- data analysis and visualization
- data management/data handling
- human dimensions
- land surface
- models
- paleoclimate
- solid earth
- spectral/engineering
- terrestrial hydrosphere

Top Sub-Categories

- agricultural plant science
- atmospheric phenomena
- atmospheric pressure
- atmospheric radiation
- atmospheric temperature
- atmospheric water vapor
- atmospheric winds
- atmospheric/ocean indicators
- data search and retrieval
- deep drilling
- erosion/sedimentation
- geochemistry

National Network of Seismic Stations of Slovakia



Authors: ESI SAS (Earth Science Institute of the Slovak Academy of Sciences)
Abstract: The Earth Sciences Institute of the Slovak Academy of Sciences (ESI SAS) operates the National Network of Seismic Stations (NNSS) and analyzes instrumental and macro-seismic data from earthquakes. The main purpose of the instrumental network is the continuous monitoring of the seismicity of Slovakia more

Superconducting Gravimeter Data from Potsdam - Level 1



Authors: Neumeyer, Jürgen; Dittfeld, Hans-Jürgen; Pflug, Hartmut et al.
Abstract: An International Geodynamics and Earth Tide Service (IGETS) was established in 2015 by the International Association of Geodesy IAG. IGETS continues the activities of the Global Geodynamics Project (GGP) between 1997 and 2015 to provide support to geodetic and geophysical research activities using more

Stress Map of the Mediterranean and Central Europe 2016



Authors: Heidbach, Oliver; Custodio, Susana; Kingdon, Andrew et al.
Abstract: The Stress Map of the Mediterranean and Central Europe 2016 displays 5011 A-C quality stress data records of the upper 40 km of the Earth's crust from the WSM database release 2016 (Heidbach et al. 2016, <http://doi.org/10.5880/WSM.2016.001>). Focal mechanism solutions determined as being potentially more

WSM WORLD STRESS MAP

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Additional Information
The World Stress Map (WSM) is a global compilation of information on the crustal present-day stress field. It is a collaborative project between scientists and industry that aims to characterize the stress pattern and to understand the stress sources. It was initiated in 1998 as a project of the International Lithosphere Program under the leadership of Heiko-Lutz Zoback. From 1999-2008 it was organized by the leading faculty of Geodesy and Geomatics headed first by Gerd Pflug and then by Fredericko Walter. Since 2009 the WSM is maintained at the GFZ German Research Centre for Geosciences and since 2012 the WSM is a member of the ICGEM Data System. All stress information is analyzed and compiled in a standard format and quality-ranked for reliability and comparability on a global scale.

Dataset Contact
Heidbach, Oliver; GPC Datacenter: Centre of Geosciences, Potsdam, Germany; heidbach@gfz-potsdam.de; <http://www.wsm-map.org>

Location
Click/hover over markers or bounding boxes to see related details. Click/over-over details to see related marker or bounding box.

Related Work
Derived from
Heidbach, O., Kingdon, A., Nauer, E. et al. (2016): World Stress Map Database Release 2016.

Find More Research Data
<https://doi.org/10.5880/WSM.2016.001>

Project-specific DOI Landing Pages/ Datacentres

Datacenters

- EnMAP
- GEOFON Seismic Events
- GEOFON Seismic Networks
- GFZ German Research Centre for Geosciences
- GIPP Geophysical Instrument Pool Potsdam
- ICGEM International Centre for Global Earth M...
- IGETS International Geodynamics and Earth Ti...
- ISDC Information System and Data Center
- PIK Potsdam Institute for Climate Impact Rese...
- SDDB Scientific Drilling Database
- SFB806 and CRC806-Database
- TERENO
- TR32DB Transregio 32 Database
- WDS World Stress Map

The image shows a collage of several project-specific DOI landing pages from various datacenters. The pages are overlapping and tilted, showing different data records. Visible titles include:

- EIGEN-6C4** The latest combined global gravity field model including GOCE data to degree and order 2190 of GFZ Potsdam and GRGS Toulouse
- Döberitzer Heide 2008/2009 - An EnMAP Preparatory Flight Campaign (Datasets)**
- TERENO (Eifel-Rur), EC/Climate station Rollesbroich 3, Germany**
- The PRIMAP-hist national historical emissions time series (1850-2014)**
- World Stress Map 2016**

Each page displays metadata, abstracts, and data files. The pages are arranged in a way that suggests a collection of diverse scientific data resources.

XML Metadata Editor

The screenshot displays the XML Metadata Editor interface with several sections:

- DataCite Metadata** (selected tab)
- Resource Information**:
 - DOI (will be generated in the publishing process): 10.5880/GFZ.1.4.2016.001
 - Publisher: GFZ Data Services
 - Year: 2016
 - Resource Type: Dataset
 - Title: Supplement to: The New World Atlas of Artificial Night Sky Brightness
 - Language of dataset: eng
- Licenses and Rights**:
 - Licence: Please contact the authors for a licence agreement
- Authors (Persons and/or Institutions)**:

Author (Lastname, Firstname)	Role	Author ID Type	Author Identifier (ID)	Affiliation
Cinzano, Pierantonio				ISTIL - Istituto di Scienza e Tecnologia ...
Duriscoe, Dan				National Park Service, U.S. Departmen...
Kyba, Christopher C. M.				GFZ German Research Centre for Geo...
Elvidge, Christopher D.				Earth Observation Group, NOAA Natio...
Baugh, Kimberly				Cooperative Institute for Research in th...
Portnov, Boris				Department of Natural Resources & En...
Rybnikova, Nataliya A.				Department of Natural Resources & En...
Furgoni, Riccardo				ISTIL - Istituto di Scienza e Tecnologia ...
- Contact Person(s) / Point of Contact**:
 - night
 - radiative transfer
 - Suomi NPP
 - Sky Quality Meter
- Temporal and Spatial Coverage (The EDIT-symbol to the left provides vi...)**:

Latitude		Longitude	
Min	Max	Min	Max
44.045486...	55.842428...	2.8710901...	43.124996...
- Select Region (click left mouse and drag)**: A map showing a selected region in Central Europe, including countries like Denmark, Poland, Germany, France, Italy, and others.



Standardised XML files
(Datacite, ISO 19115,
NASA GCMD DIF,
Dublin Core)



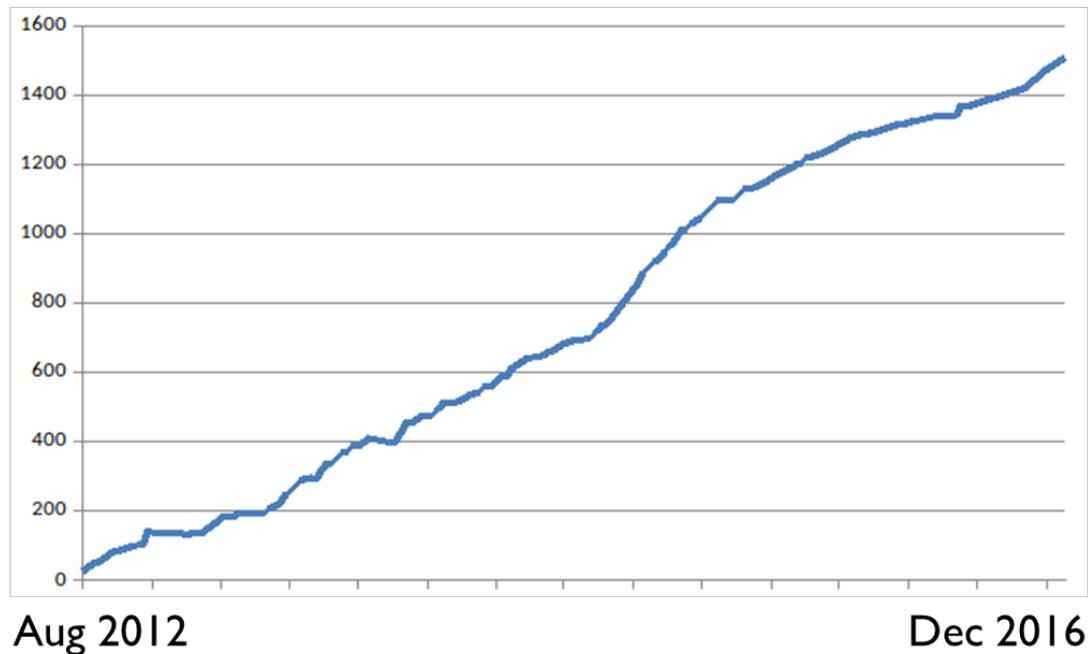
GFZ Data Services
Metadata Catalogue

How do I find an appropriate data repository?



- **global registry** of research data repositories
- covers **all academic disciplines**
- presents repositories and portals for the **permanent storage** and **access** of research data sets to researchers, funding bodies, publishers and scholarly institutions.
- promotes a culture of **sharing, increased access and better visibility** of research data

1775 repositories indexed (06.12.2016)



re3data.org - metadata schema

Version 3.0



41 Properties on

- General information
- Responsibilities
- Policies
- Legal aspects
- Technical standards
- Quality standards

Icons – facilitating the selection process of appropriate research data repositories



The research data repository provides additional information on its service.

The research data repository is either certified or supports a repository standard.



The research data repository provides a policy.



The research data repository provides open/restricted/closed access to its data.

The research data repository uses a persistent identifier system to make its provided data persistent, unique and citable.



The terms of use and licenses of the data are provided by the research data repository.

simple search box

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icons

Found 1 result(s)

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Subject(s) Geosciences (including Geography) Natural Sciences

Content type(s) Raw data Structured graphics Images Scientific and statistical data formats
Plain text

Country Canada

Nordicana series D is a formatted, online data report series archived at CEN. It is produced only in electronic form and is freely and openly accessible to CEN researchers and to other users. Each issue is published in French and in English, and is indexed via an assigned digital object identifier (DOI). An issue may be updated, for example with new data, as a new version number, but will retain the same DOI. Each issue contains data sets and extensive metadata that explain the origin of the data, the format of the data, the history of updates via different version numbers, and the format that should be adopted to cite the data.

filters

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Questions?
Comments?

Thank you for you attention!