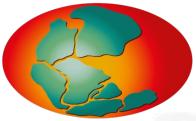


# PANGAEA.

Data Publisher for Earth & Environmental Science

# Data Science in Environmental Science and Oceanography with R and Python

Diren Senger, Kathrin Riemann-Campe,  
Maren Rebke & Dana Ransby



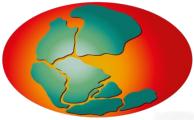
# Who are you?



Please let us know about yourself

- What is your background?
- What are your expectations?
  - What do you use scripting languages for?
  - Have you shared your own data?
  - Have you reused data by others?
  - Have you got experiences with any data repository?





- Questions any time
- Break suggestions
- Friday: credit points
- Agenda, course notes

## Agenda - Day 1: PANGAEA and R & Python basics

Aug 20th	Topic	Presenter
10:00	Round of introductions (20 min)	all including participants
10:00	Intro PANGAEA, data repos (20 min)	DR
10:20	How to find and use data from PANGAEA (15 mins)	KRC
10:35	Quiz (10 min)	KRC
10:45	How to download datasets (10 min)	KRC
10:55	Questions I (10 min)	KRC & DR
11:05	<b>break</b>	
11:15	Intro to PANGAEA packages and tokens (20-25 min)	DR
11:35	Questions II (10min)	DR & KRC
11:45	<b>Lunch break</b>	
02:00	basics R and python	DS
04:30	end of day 1	



## Agenda - Day 2: Getting data from PANGAEA und Data Cleaning

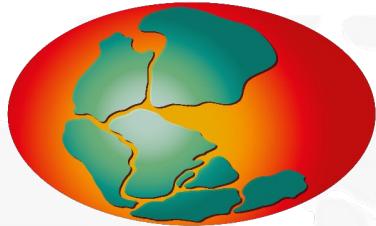
Aug 21st	Topic	Presenter
09:00	Downloading and manipulating PANGAEA data in R - in brief	DR
09:45	<b>Minibreak</b>	
09:50	Downloading and manipulating PANGAEA data in Python (100 min including <b>bio break</b> after 45 min)	KRC
12:30	<b>Lunch break</b>	
02:00	Data Cleaning in python	KRC
03:40	Data Cleaning in R	DS
04:30	end of day 2	

# Agenda - Day 3: Plotting und Statistics

Aug 22nd	Topic	Presenter
09:00	Intro and Cleaning of Penguin data set, Plotting & Statistics	DS & MR
12:30	<b>Lunch break</b>	
02:00	Markdown & time for open Questions	all
04:30	end of day 3	

# Course notes



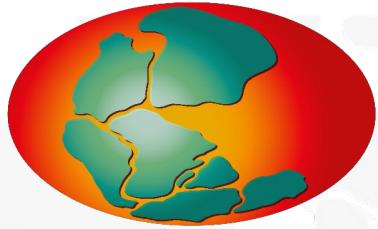


# PANGAEA.

Data Publisher for Earth & Environmental Science

## PANGAEA and other scientific data repositories

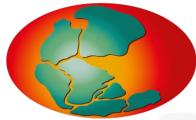
Dana Ransby, Kathrin Riemann-Campe  
and PANGAEA training team



# PANGAEA.

Data Publisher for Earth & Environmental Science

## Introduction to PANGAEA



# PANGAEA data publisher



- Information system for long-term archival and publication of scientific data
- Established ± 30 years ago
- Hosted by:



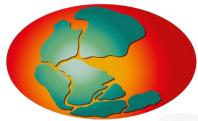
Welcome to PANGAEA® Data Publisher

Our services are open for archiving, publishing, and distributing georeferenced data from earth system research. The World Data Center PANGAEA is a member of the World Data System.

ALL TOPICS

Search for measurement type, author name, project, taxa,...

 CHEMISTRY (73396)	 LITHOSPHERE (50159)	 BIOLOGICAL CLASSIFICATION (34212)	 ATMOSPHERE (31652)	 PALEONTOLOGY (26839)
 OCEANS (22227)	 ECOLOGY (20791)	 LAND SURFACE (8424)	 BIOSPHERE (4563)	 GEOPHYSICS (4162)



# PANGAEA data publisher



- Information system for long-term archival and publication of scientific data
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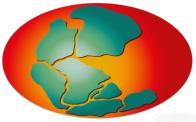
ALL TOPICS

Search for measurement type, author name, project, taxa, ...

 CHEMISTRY (73996)	 LITHOSPHERE (50159)	 BIOLOGICAL CLASSIFICATION (34212)	 ATMOSPHERE (31652)	 PALEONTOLOGY (26839)
 OCEANS (22227)	 ECOLOGY (20791)	 LAND SURFACE (8424)	 BIOSPHERE (4563)	 GEOPHYSICS (4162)
 ICE	 WATER	 SOIL	 LIFE	 CLIMATE

- Accredited:

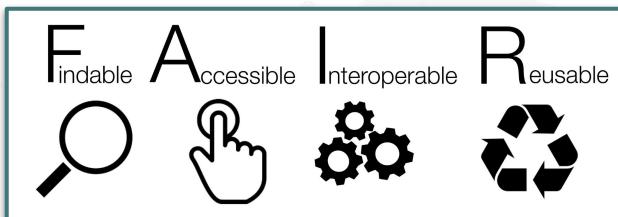
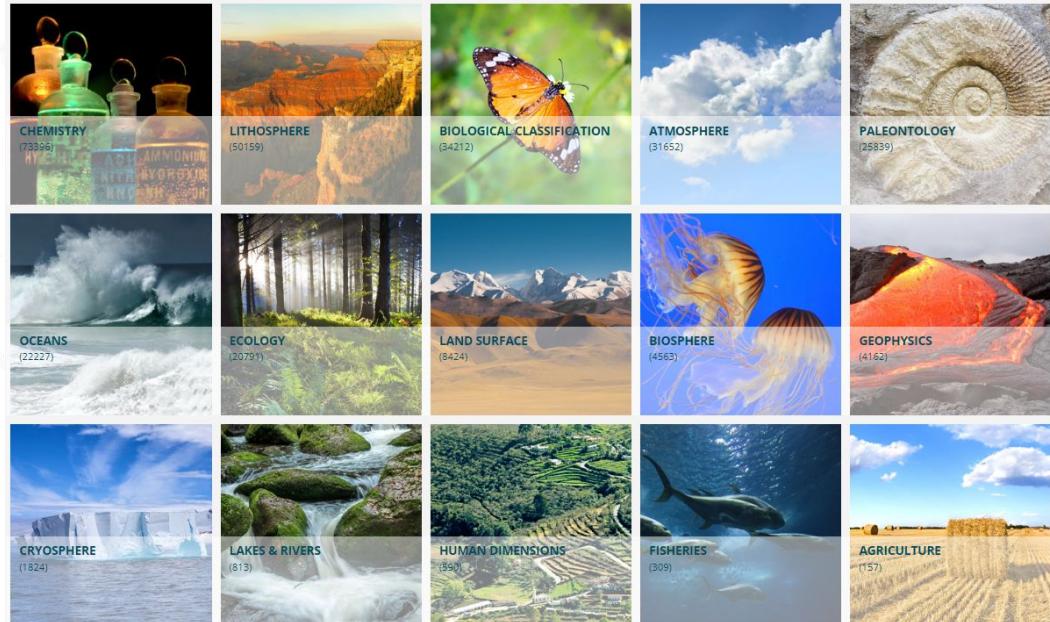




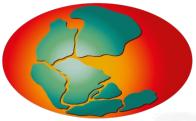
# Data variety



- multidisciplinary data
- heterogeneous data types
- quality controlled data via manual review & curation



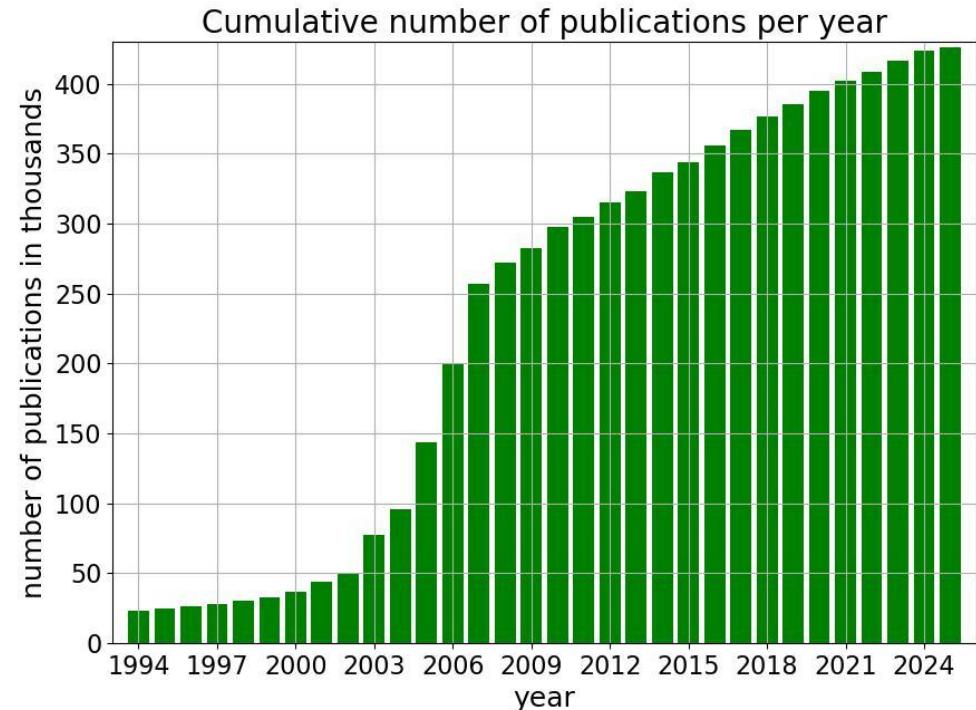
Wilkinson et al.(2016) <https://doi.org/10.1038/sdata.2016.18>



# PANGAEA in figures



- > 430.000 datasets
- > 850 projects
- New datasets per year:  
~ 10,000





# Who is behind PANGAEA?

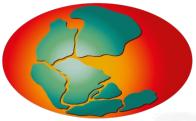
- Team consists of ...
  - Data editors
  - Scientific project & data managers
  - Software developers
  - Management & coordination
- ...and associated partners

 HELMHOLTZ  
ZENTRUM FÜR  
UMWELTFORSCHUNG  
UFZ

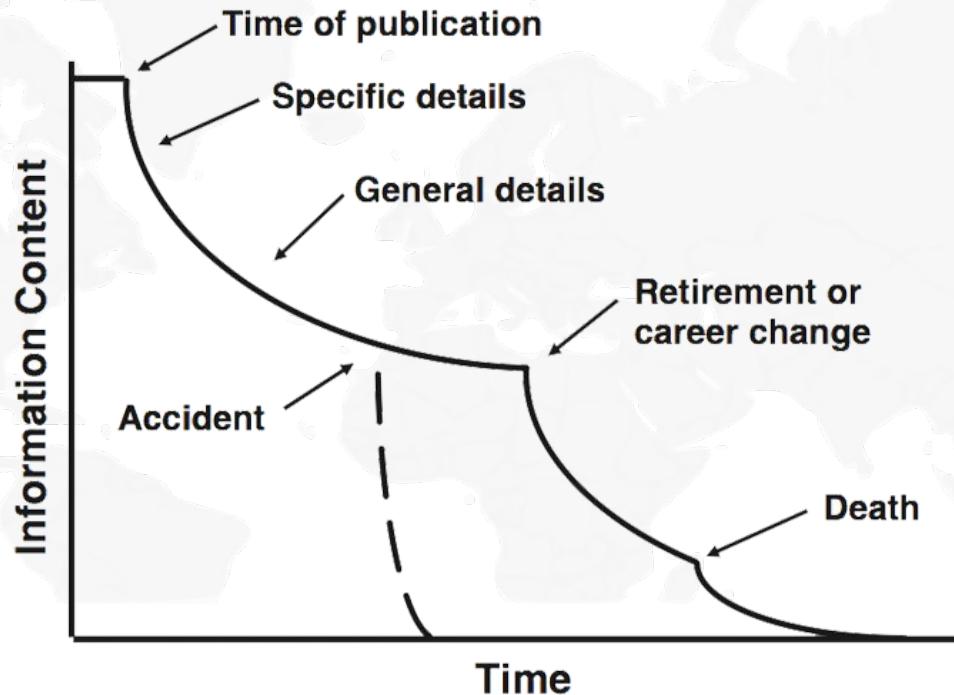
 GEOMAR  
Helmholtz Centre for Ocean Research Kiel

 ZMT  
LEIBNIZ-ZENTRUM  
für Marine Tropenforschung

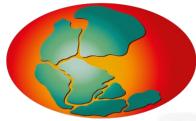




# Why publishing data?



Michener, 2006 (orig. 1987), Ecological Informatics, 3-7, <https://doi.org/10.1016/j.ecoinf.2005.08.004>



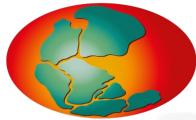
# Why publish data FAIR?



## Benefits for society:

1. Improves access to research data for people outside academia.
2. Transparency/accessibility strengthens public trust in science.
3. Open data can play a role in guiding governmental policy.
4. Benefits the public purse by reducing repeat work.



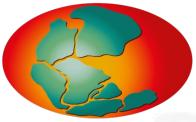


# Why publish data FAIR?



## Benefits for the research community:

1. Agreement by following the general rules of good scientific practice.
2. Access for reuse and reinterpretation of data is significantly facilitated.
3. New insights can be gained more easily that lead to new research approaches.
4. Empowers the scientific community by allowing the replication of experiments.
5. Avoids/reduces the often expensive duplication of scientific experiments.
6. Improves the robustness and veracity, and thus impact, of research results.
7. Saves researchers from additional expenses by allowing them to use open data.



# Why publish data FAIR?



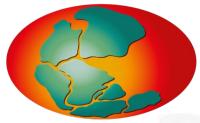
## Benefits for the author:

1. Leads to more citations of published research articles (up to 25%)<sup>1, 2, 3</sup>
2. Cross-referencing to research articles boosts researchers' impact profiles (e.g. Scholix, Data Citation Index).
3. Enhances the visibility and discoverability in the scientific community.
4. Improves the transparency and comprehensibility of research work.
5. Greater recognition and reputation may lead to new collaborations.
6. Expands your range of audience and increases cross-disciplinary interest.
7. Provides others with the means to properly cite your data.
8. Ensures that you receive the credit you deserve for your work.
9. Data authors ≠ Paper authors: Receive credit "only" for data generation and processing.

<sup>1</sup> Colavizza G, et al. (2020) The citation advantage of linking publications to research data. PLOS ONE 15(4): e0230416. <https://doi.org/10.1371/journal.pone.0230416>

<sup>2</sup> Drachen TM, et al. (2016) Sharing data increases citations. LIBER Quarterly: The Journal of the Association of European Research Libraries, <https://doi.org/10.18352/lq.10149>

<sup>3</sup> Piwowar HA, Vision TJ (2013) Data reuse and the open data citation advantage. PeerJ 1:e175 <https://doi.org/10.7717/peerj.175>



# Still in doubts about why publishing data?



YouTube DE

Search



Data Sharing and Management Snafu in 3 Short Acts  
by Karen Hanson, Alisa Surkis & Karen Yacobucci  
NYU Health Sciences Libraries  
August 3, 2012 (Last Update: December 12, 2012)



0:00 / 4:40

• ▶ CC ⌂ ⌂ ⌂ ⌂ ⌂

Data Sharing and Management Snafu in 3 Short Acts (Higher Quality)

NYU Health Sciences Library  
1.03K subscribers

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604



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Clip



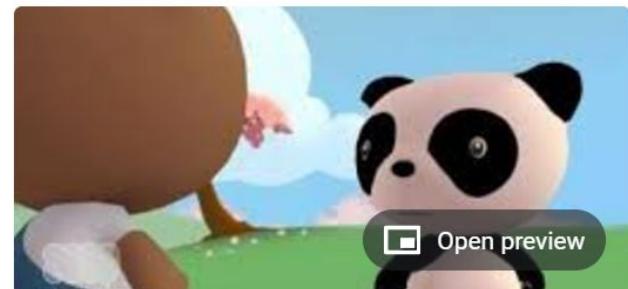
Save



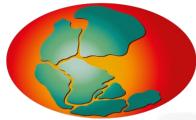
...

[https://youtu.be/66oNv\\_DJuPc](https://youtu.be/66oNv_DJuPc)

▶ Data Sharing and Manag...  
youtu.be



A higher resolution version of the video. A data management horror story by Karen Hanson, Alis...



## Why publishing data?



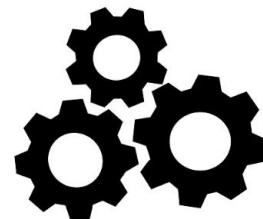
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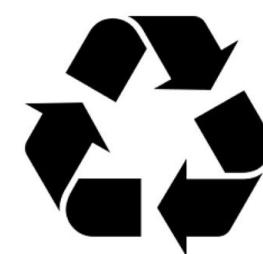
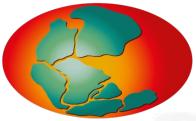


Image credit: FAIR data principles by Sangya Pundir at [Wikimedia Commons](#)



# F.A.I.R. Data Archiving & Publishing



Findable



Accessible



Interoperable



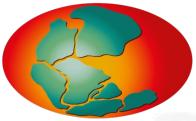
Reusable



©DALL-E

According to the F.A.I.R. principles data have to be machine-readable.

Wilkinson M, et al. The FAIR Guiding Principles for scientific data management and stewardship. *Sci Data* 3, 160018 (2016). <https://doi.org/10.1038/sdata.2016.18>



# FAIR (Meta)data at PANGAEA



## Citation:

**Bijma, Jelle; Rohardt, Gerd (2021):** Physical oceanography during HEINCKE cruise HE575. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, doi: <https://doi.org/10.1594/PANGAEA.934145>

Always quote citation above when using data! You can download the citation in several formats below.

[RIS Citation](#) [BibTeX Citation](#) [Copy Citation](#) [Facebook](#) [Twitter](#) [Show Map](#) [Google Earth](#)    [19](#) [4](#)

## Full citation with DOI!

### Abstract:

Conductivity-temperature-depth profiles were measured using a Seabird SBE 911plus CTD during RV Heincke cruise HE575 between 18.04.2021 and 01.05.2021. Additional sensors included a WET Labs C-Star transmissometer and a WET Labs ECO-AFL fluorometer. Data were connected to the station book of the specific cruise as available in the DSHIP database. Processing of the data including removal of obvious outliers followed the procedures described in CTD Processing Logbook of RV Heincke ([hdl:10013/epic.47427](https://hdl.handle.net/10013/epic.47427)). A detailed report on the CTD data of HE575 is available at <https://hdl.handle.net/10013/c7d9939e-4d7d-4fa2-80ad-a0627a766195>.

### Keyword(s):

CTD [Q](#); HE575 [Q](#); Heincke [Q](#)

### Further details:

Müller-Michaelis, Antje; Rohardt, Gerd (2016): CTD Processing Logbook of RV Heincke. [hdl:10013/epic.47427.d001](https://hdl.handle.net/10013/epic.47427.d001) [Q](#)

Rohardt, Gerd (2021): CTD Processing Report of RV Heincke HE575. [hdl:10013/epic.c7d9939e-4d7d-4fa2-80ad-a0627a766195](https://hdl.handle.net/10013/epic.c7d9939e-4d7d-4fa2-80ad-a0627a766195) [Q](#)

### Project(s):

Physical Oceanography @ AWI (AWI\_PhysOce) [Q](#)

### Coverage:

Median Latitude: 53.950018 \* Median Longitude: 7.959461 \* South-bound Latitude: 53.843040 \* West-bound Longitude: 7.904090 \* North-bound Latitude: 54.057020 \* East-bound Longitude: 8.100930

Date/Time Start: 2021-04-19T07:59:47 \* Date/Time End: 2021-04-25T13:25:54

Minimum DEPTH, water: 1.4 m \* Maximum DEPTH, water: 35.1 m

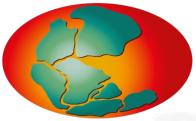


## Findable:

- Persistent identifier
- Rich metadata
- Searchable online

## Accessible:

- Retrievable using standardized communication protocols
- Metadata is open
- Access restriction possible



# FAIR (Meta)data at PANGAEA

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T

Event(s):

**HE575\_1-1** \* Latitude: 53.843040 \* Longitude: 8.100930 \* Date/Time: 2021-04-19T07:59:47 \* Elevation: -7.4 m \* Location: North Sea [Q](#) \* Campaign: HE575 [Q](#) \* Basis: Heincke [Q](#) \* Method/Device: CTD/Rosette (CTD-RO) [Q](#)

**HE575\_2-1** \* Latitude: 53.901590 \* Longitude: 7.938840 \* Date/Time: 2021-04-19T11:24:06 \* Elevation: -15.1 m \* Location: North Sea [Q](#) \* Campaign: HE575 [Q](#) \* Basis: Heincke [Q](#) \* Method/Device: CTD/Rosette (CTD-RO) [Q](#)

**HE575\_4-1** \* Latitude: 53.935750 \* Longitude: 7.952520 \* Date/Time: 2021-04-24T09:55:16 \* Elevation: -16.3 m \* Location: North Sea [Q](#) \* Campaign: HE575 [Q](#) \* Basis: Heincke [Q](#) \* Method/Device: CTD/Rosette (CTD-RO) [Q](#)

[Show more...](#)

Parameter(s):

#	Name	Short Name	Unit	Principal Investigator	Method/Device	Comment
1	Event label <a href="#">Q</a>	Event		Rohardt, Gerd <a href="#">Q</a>		
2	Date/Time of event <a href="#">Q</a>		Date/Time	Rohardt, Gerd <a href="#">Q</a>		
3	Latitude of event <a href="#">Q</a>		Latitude	Rohardt, Gerd <a href="#">Q</a>		
4	Longitude of event <a href="#">Q</a>		Longitude	Rohardt, Gerd <a href="#">Q</a>		
5	Elevation of event <a href="#">Q</a>		Elevation	m	Rohardt, Gerd <a href="#">Q</a>	
6	DEPTH, water <a href="#">Q</a>		Depth water	m	Rohardt, Gerd <a href="#">Q</a>	CTD, SEA-BIRD SBE 911plus, SN 1015 <a href="#">Q</a> , Geocode
7	Pressure, water <a href="#">Q</a>		Press	dbar	Rohardt, Gerd <a href="#">Q</a>	CTD, SEA-BIRD SBE 911plus, SN 1015 <a href="#">Q</a>
8	Temperature, water <a href="#">Q</a>		Temp	°C	Rohardt, Gerd <a href="#">Q</a>	CTD, SEA-BIRD SBE 911plus, SN 1015 <a href="#">Q</a> , ITS-90
9	Conductivity <a href="#">Q</a>		Cond	mS/cm	Rohardt, Gerd <a href="#">Q</a>	CTD, SEA-BIRD SBE 911plus, SN 1015 <a href="#">Q</a>
10	Salinity <a href="#">Q</a>		Sal		Rohardt, Gerd <a href="#">Q</a>	CTD, SEA-BIRD SBE 911plus, SN 1015 <a href="#">Q</a> , PSU
11	Temperature, water, potential <a href="#">Q</a>		Tpot	°C	Rohardt, Gerd <a href="#">Q</a>	Calculated <a href="#">Q</a>
12	Density, sigma-theta (0) <a href="#">Q</a>		Sigma-theta	kg/m³	Rohardt, Gerd <a href="#">Q</a>	Calculated <a href="#">Q</a>
13	Oxygen <a href="#">Q</a>	O2		μmol/l	Rohardt, Gerd <a href="#">Q</a>	CTD, SEA-BIRD SBE 911plus, SN 1015 <a href="#">Q</a> , not calibrated
14	Oxygen saturation <a href="#">Q</a>	O2 sat		%	Rohardt, Gerd <a href="#">Q</a>	CTD, SEA-BIRD SBE 911plus, SN 1015 <a href="#">Q</a> , not calibrated
15	Attenuation, optical beam transmission <a href="#">Q</a>	Attenuation		arbitrary units	Rohardt, Gerd <a href="#">Q</a>	CTD, SEA-BIRD SBE 911plus, SN 1015 <a href="#">Q</a>
16	Fluorometer <a href="#">Q</a>	Fluorometer		arbitrary units	Rohardt, Gerd <a href="#">Q</a>	CTD, SEA-BIRD SBE 911plus, SN 1015 <a href="#">Q</a>
17	Number of observations <a href="#">Q</a>	NOBS	#		Rohardt, Gerd <a href="#">Q</a>	

License:

Creative Commons Attribution 4.0 International (CC-BY-4.0)

Size:

8943 data points

Open Access Licence

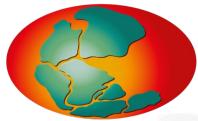
Wilkinson et al. (2016) The FAIR Guiding Principles for scientific data management and stewardship. Sci Data 3, 160018. <https://doi.org/10.1038/sdata.2016.18>

Interoperable:

- Common formats and standards
- Controlled vocabularies

Reusable:

- Rich metadata
- License information



# FAIR (Meta)data at PANGAEA



Size:

8943 data points

## Data

[Download dataset as tab-delimited text — use the following character encoding:](#)

1 ⓘ Event	2 ⓘ Date/Time	3 ⓘ Latitude	4 ⓘ Longitude	5 ⓘ Elevation [m]	6 ⓘ Depth water [m]	7 ⓘ Press [dbar]	8 ⓘ Temp [°C]	9 ⓘ Cond [ms/cm]	10 ⓘ Sal	11 ⓘ Tpot [°C]	12 ⓘ Sigma-theta [kg/m³]	13 ⓘ O2 [µmol/l]	14 ⓘ O2 sat [%]	15 ⓘ Attenuation [arbitrary units]
HE575_1-1	2021-04-19T07:59	53.8430	8.1009	-7	1.4	1.4	7.5927	29.1306	27.8261	7.5926	21.6994	322.774	103.46	2
HE575_1-1	2021-04-19T07:59	53.8430	8.1009	-7	1.6	1.6	7.5904	29.1319	27.8292	7.5903	21.7021	322.664	103.42	2
HE575_1-1	2021-04-19T07:59	53.8430	8.1009	-7	1.8	1.8	7.5880	29.1328	27.8321	7.5878	21.7046	322.645	103.41	2
HE575_1-1	2021-04-19T07:59	53.8430	8.1009	-7	2.0	2.0	7.5882	29.1332	27.8322	7.5880	21.7047	322.848	103.47	2
HE575_1-1	2021-04-19T07:59	53.8430	8.1009	-7	2.2	2.2	7.5893	29.1333	27.8314	7.5891	21.7039	322.755	103.45	2
HE575_1-1	2021-04-19T07:59	53.8430	8.1009	-7	2.4	2.4	7.5834	29.1327	27.8354	7.5832	21.7078	322.911	103.48	2
HE575_1-1	2021-04-19T07:59	53.8430	8.1009	-7	2.6	2.6	7.5801	29.1316	27.8367	7.5799	21.7093	323.036	103.52	2
HE575_1-1	2021-04-19T07:59	53.8430	8.1009	-7	2.8	2.8	7.5769	29.1312	27.8388	7.5767	21.7114	323.025	103.51	1
HE575_1-1	2021-04-19T07:59	53.8430	8.1009	-7	3.0	3.0	7.5754	29.1308	27.8395	7.5751	21.7121	322.811	103.44	1
HE575_1-1	2021-04-19T07:59	53.8430	8.1009	-7	3.2	3.2	7.5793	29.1316	27.8371	7.5790	21.7098	322.716	103.41	1
HE575_1-1	2021-04-19T07:59	53.8430	8.1009	-7	3.4	3.4	7.5716	29.1323	27.8439	7.5713	21.7161	322.911	103.46	1
HE575_1-1	2021-04-19T07:59	53.8430	8.1009	-7	3.6	3.6	7.5701	29.1318	27.8446	7.5698	21.7168	322.789	103.42	1
HE575_1-1	2021-04-19T07:59	53.8430	8.1009	-7	3.8	3.8	7.5686	29.1333	27.8472	7.5683	21.7191	322.668	103.38	1
HE575_1-1	2021-04-19T07:59	53.8430	8.1009	-7	4.0	4.0	7.5581	29.1375	27.8600	7.5578	21.7304	322.599	103.34	1
HE575_1-1	2021-04-19T07:59	53.8430	8.1009	-7	4.2	4.2	7.5564	29.1295	27.8529	7.5560	21.7251	322.620	103.34	1
HE575_1-1	2021-04-19T07:59	53.8430	8.1009	-7	4.4	4.4	7.5516	29.1419	27.8697	7.5512	21.7389	322.595	103.33	1

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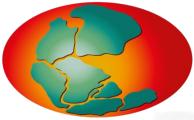


# Why publish data with PANGAEA?



- **Highest FAIRness score of research data repositories in Europe<sup>1</sup>**
- **Structured database - dataset comparability/interoperability**
- **Cost-free for the individual scientist (data volume dependent), see ToU**
- **Expert support and quality control of (meta-)data during publication**
- **(Meta-)data access by various data portals and search tools**

<sup>1</sup>European Commission, Directorate-General for Research and Innovation, *European Research Data Landscape : final report*, Publications Office of the European Union, 2022, <https://data.europa.eu/doi/10.2777/3648>



# Data discoverability

- publishers and metric systems

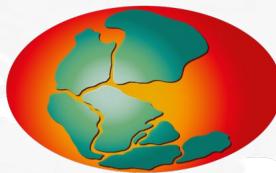


Europe  
PubMed  
Central

ScienceDirect



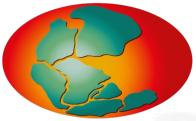
Altmetric



Scopus®



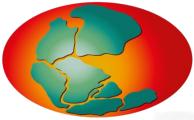
THOMSON REUTERS



# Data discoverability

- publishers and metric systems
- search engines and aggregators



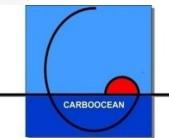


# Data discoverability

- publishers and metric systems
- search engines and aggregators
- community & project portals



OCEAN BIODIVERSITY  
INFORMATION SYSTEM



IODP  
INTERNATIONAL OCEAN  
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GEO GROUP ON  
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WORLD  
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ORGANIZATION

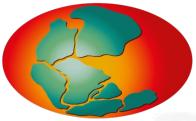


Google



INSPIRE  
GeoPortal

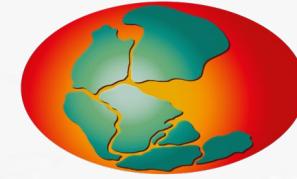




# Data discoverability



- publishers and metric systems
- search engines and aggregators
- community & project portals
- research data infrastructures





# What other repositories are there?



<https://www.re3data.org/>

re3data.org

Search Browse ▾ Suggest Resources ▾ Contact

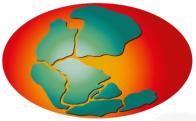
## Browse by subject

Graphical

Text

click to zoom into subjects or to select a bottommost subject in the hierarchy as filter for the re3data search page  
shift + click on a top subject to select it as filter





## Cross-Linking



Projects



Researchers

Publications

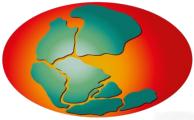
Samples



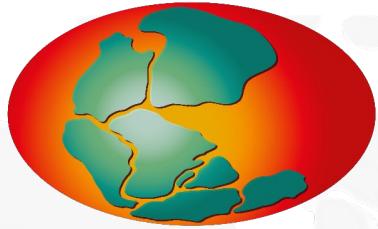
Sequences

Organisms





# Time for questions

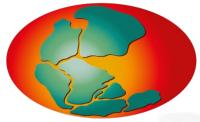


# PANGAEA.

Data Publisher for Earth & Environmental Science

## How to find and use data from PANGAEA

Kathrin Riemann-Campe



# Overview



## How to use PANGAEA

- How to find the right datasets => Quiz
- How to download datasets



# How to find the right datasets



Several approaches to search the database

- via keywords
- via map
- via geographical coordinates
- specific features



# Search via keywords

- start with any keyword in search panel

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<b>OCEANS</b> (2224)	<b>ECOLOGY</b> (2081)	<b>LAND SURFACE</b> (844)	<b>BIOSPHERE</b> (458)	<b>GEOPHYSICS</b> (4170)
<b>CRYOSPHERE</b> (182)	<b>LAKES &amp; RIVERS</b> (817)	<b>HUMAN DIMENSIONS</b> (392)	<b>FISHERIES</b> (309)	<b>AGRICULTURE</b> (157)

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2024-01-08 **HAPPY NEW YEAR!**  
 The PANGAEA Data Editorial Office has returned from holiday season and started processing data submissions on 2024-01-08.  
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Anhaus, P; Kettlein, C; Mastro, I et al. (2023): Under-ice environment surveys using a remotely operated vehicle (ROV) during the MOSAIC expedition 2019/20  
doi: <https://doi.org/10.1594/PANGAEA.951077>

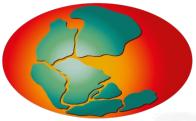
Matevski, D; Glathorn, J; Foltran, EC (2022): Leaf damage data on European beech leaves from saplings and mature trees from Lower Saxony, Germany in 2019  
doi: <https://doi.org/10.1594/PANGAEA.949421>

Zabel, M (2022): Pore water and solid phase data from deep-sea trench sediments  
doi: <https://doi.org/10.1594/PANGAEA.947269>

Hopmann, M; Kuznetsov, I; Fang, Y-C et al. (2022): Processed data of CTD buoys 201901 to 201908 as part of the MOSAIC Distributed Network  
doi: <https://doi.org/10.1594/PANGAEA.940320>

Dorschel, B; Hehemann, L; Viquerat, S et al. (2022): The International Bathymetric Chart of the Southern Ocean Version 2 (IBCSO v2)  
doi: <https://doi.org/10.1594/PANGAEA.937574>

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# Search via keywords

- start with any keyword in search panel



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**MOSAIC**

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- MOSAIC team ECO
- MOSAIC201920\_Drift\_Winter
- MOSAIC\_Arctic\_ice\_drift\_deformation
- @MOSAICPO
- MOSAIC\_HELI
- MOSAIC\_PO
- MOSAIC\_expedition
- MOSAIC-ACA
- MOSAIC-ICE
- MOSAIC201920
- MOSAIC\_ATMOS

**CHEMISTRY**

**LITHOSPHERE**

**OCEANS**

**ECOLOGY**

**LAND SURFACE**

**BIOSPHERE**

**CRYOSPHERE**

**LAKES & RIVERS**

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**GEOPHYSICS**

**AGRICULTURE**

**HAPPY NEW YEAR!**

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**Featured Data**

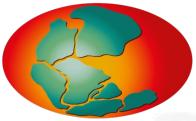
Anhaus, P; Katilein, C; Matero, I et al. (2023): Under-ice environment surveys using a remotely operated vehicle (ROV) during the MOSAIC expedition 2019/20 <https://doi.org/10.1594/PANGAEA.951077>

Matevski, D; Glathorn, J; Foltran, EC (2022): Leaf damage data on European beech leaves from saplings and mature trees from Lower Saxony, Germany <https://doi.org/10.1594/PANGAEA.949421>

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# Search via keywords

- start with any keyword in search panel

Not logged in

SEARCH SUBMIT HELP ABOUT CONTACT

PANGAEA.

ALL TOPICS

MOSAiC

X

?

Filter by...

Dataset Author

Nicolaus, Marcel (2178)  
Katerin, Christian (2138)  
Anhues, Philipp (2037)  
Schiller, Martin (1992)  
Rohde, Jan (1776)  
Regnery, Julia (1775)  
Arndt, Stefanie (1761)  
Matero, Ilkka (1575)  
[more...](#)

Dataset Publication Year

unpublished (126)  
 2024 (204)  
 2023 (2318)  
 2022 (2369)  
 2021 (493)  
 2020 (88)  
 2019 (27)  
 2018 (17)  
[more...](#)

Topic

Ecology (1345)  
Environmental Sciences (1333)  
Chemistry (245)  
Multidisciplinary Sciences (200)  
Organic Chemistry (141)  
Atmosphere (110)  
Inorganic Chemistry (100)  
Lithosphere (78)  
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Project

MOSAiC (4126)  
 AWI\_Seaice (2113)  
 FRAM (2014)  
 ACS (615)  
 ARTofMELT (270)  
 iceSense (196)  
 meereisportal.de (162)

4764 datasets found on search for »MOSAiC«

< 1 2 3 4 5 6 7 8 9 10 >

1. **Stephens, M (2022):** Beryllium-7 concentrations in snow, ice, seawater, and aerosols during the MOSAiC expedition  
Size: 4 datasets

<https://doi.org/10.1594/PANGAEA.945414> - Score: 31.93

2. **Stephens, M (2022):** Beryllium-7 concentrations in seawater during the MOSAiC expedition  
Size: 75 data points

<https://doi.org/10.1594/PANGAEA.945403> - Score: 26.75

3. **Moser, M; Voigt, C; Hahn, V (2022):** DLR in-situ cloud measurements during MOSAiC-ACA Arctic airborne campaign

Size: 40 data points

<https://doi.org/10.1594/PANGAEA.940557> - Score: 26.58

4. **Stephens, M (2022):** Beryllium-7 concentrations in ice during the MOSAiC expedition  
Size: 187 data points

<https://doi.org/10.1594/PANGAEA.945408> - Score: 26.55

5. **Stephens, M (2022):** Beryllium-7 concentrations in aerosols during the MOSAiC expedition  
Size: 98 data points

<https://doi.org/10.1594/PANGAEA.945413> - Score: 26.34

6. **Heinemann, G (2022):** Regional climate model simulations (CCLM 15km) of near-surface variables for the MOSAiC winter period  
Related to: Heinemann, G; Scheffczyk, L; Willmes, S et al. (2022): Evaluation of simulations of near-surface variables using the regional climate model CCLM for the MOSAiC winter period. *Elementa - Science of the Anthropocene*

Size: 8 data points

<https://doi.org/10.1594/PANGAEA.944502> - Score: 26.24

7. **Stephens, M (2022):** Beryllium-7 concentrations in snow during the MOSAiC expedition  
Size: 1204 data points

<https://doi.org/10.1594/PANGAEA.945412> - Score: 26.03

8. **Solomon, A; Jozef, G (2024):** Coupled Arctic Forecast System (CAFS) forecasts used in study evaluating atmospheric stability with MOSAiC soundings

Related to: Solomon, A; Shupe, MD; Svensson, G et al. (2023): The winter central Arctic surface energy budget: A model evaluation using observations from the MOSAiC campaign. *Elementa - Science of the Anthropocene*  
Size: 348 data points

<https://doi.org/10.1594/PANGAEA.964776> - Score: 25.93

9. **Haege, A; Honne, F (2021):** Internal stress raw data (Stress logger HSV4) of sea ice during MOSAiC expedition

To create a new geographic search coverage, use the buttons and input fields to enter coordinates below. The GPS button (top-left of wind rose) selects the area around your current location. For using the map, select the area around your current location. For using the map, select the viewport button (top-right of wind rose) and drag or zoom the bounding rectangle on its borders. You can also select a date range by entering a start/end date. Press "Apply" to restrict current search results!

Map Satellite

Google Map data ©2024 Imagery ©2024 NASA 1000 km

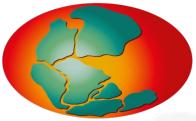
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W E N S

Clear S Apply

Start date: YYYY-MM-DD Clear

End date: YYYY-MM-DD Apply



# Search via keywords

- start with any keyword in search panel

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MOSAiC

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Filter by...

Dataset Author

Nicolaus, Marcel (2178)  
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4764 datasets found on search for »MOSAiC«

< 1 2 3 4 5 6 7 8 9 10 >

1. Stephens, M (2022): Beryllium-7 concentrations in snow, ice, seawater, and aerosols during the MOSAiC expedition  
Size: 4 datasets

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2. Stephens, M (2022): Beryllium-7 concentrations in seawater during the MOSAiC expedition  
Size: 75 data points

<https://doi.org/10.1594/PANGAEA.945403> - Score: 26.75

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Size: 40 data points

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Size: 187 data points

<https://doi.org/10.1594/PANGAEA.945408> - Score: 26.55

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Size: 98 data points

<https://doi.org/10.1594/PANGAEA.945413> - Score: 26.34

6. Heinemann, G (2022): Regional climate model simulations (CCLM 15km) of near-surface variables for the MOSAiC winter period  
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Size: 8 data points

<https://doi.org/10.1594/PANGAEA.944502> - Score: 26.24

7. Stephens, M (2022): Beryllium-7 concentrations in snow during the MOSAiC expedition  
Size: 1204 data points

<https://doi.org/10.1594/PANGAEA.945412> - Score: 26.03

8. Solomon, A; Jozef, G (2024): Coupled Arctic Forecast System (CAFS) forecasts used in study evaluating atmospheric stability with MOSAiC soundings  
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Map Satellite

Google Map data ©2024 Imagery ©2024 NASA 1000 km

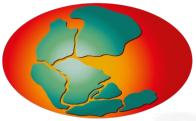
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W E  
N S

Clear Apply

Start date: YYYY-MM-DD Clear

End date: YYYY-MM-DD Apply



# Search via keywords

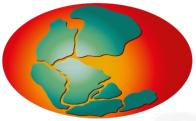
- start with any keyword in search panel
- refine with facet filter

The screenshot shows the PANGAEA search interface. At the top, there's a search bar with the placeholder "Filter by...". Below it, a sidebar titled "Dataset Author" lists names like Niclaus, Marcel (1903), Katslein, Christian (1867), Rohde, Jan (1776), etc. A section for "Dataset Publication Year" includes checkboxes for years from 1903 to 2024. The "Topic" section lists categories such as Ecology, Environmental Sciences, Chemistry, Multidisciplinary Sciences, Organic Chemistry, Atmosphere, Inorganic Chemistry, and Geosciences, Multidisciplinary. A "Project" section has checkboxes for MOSAiC (4126), AWI\_Seaice (2113), ProjEx (2014), AC3 (615), ARTOfMELT (270), iceSense (196), meeressportal.de (162), and HAVOC (56). The "more..." link is at the bottom.

The main search results page displays 4126 datasets found on search for "»MOSAiC« with facet filters". The results are paginated from 1 to 10. Each result entry includes the author, title, size, and a DOI link. For example, the first result is "Stephens, M (2022): Beryllium-7 concentrations in snow, ice, seawater, and aerosols during the MOSAiC expedition". The second result is "Stephens, M (2022): Beryllium-7 concentrations in seawater during the MOSAiC expedition". The third result is "Moser, M; Voigt, C; Hahn, V (2022): DLR in-situ cloud measurements during MOSAiC-ACA Arctic airborne campaign". The fourth result is "Stephens, M (2022): Beryllium-7 concentrations in ice during the MOSAiC expedition". The fifth result is "Stephens, M (2022): Beryllium-7 concentrations in aerosols during the MOSAiC expedition". The sixth result is "Heinemann, G (2022): Regional climate model simulations (CCLM 15km) of near-surface variables for the MOSAiC winter period". The seventh result is "Stephens, M (2022): Beryllium-7 concentrations in snow during the MOSAiC expedition". The eighth result is "Haase, A; Hoppe, F (2021): Internal stress raw data (Stress Logger HSV4) of sea ice during MOSAiC expedition, legs 1, 2 and 3". The ninth result is "Li, T; Zhu, J; Zhai, L (2021): Drift Towing Ocean Profiler (DTOP) data on sea ice, meteorological conditions and drift of sea ice from buoy 2019V5, deployed during MOSAiC 2019/20".

The right side of the interface features a world map with "Map" and "Satellite" buttons. Below the map are search fields for "N", "S", "E", and "W" coordinates, with "Clear" and "Apply" buttons. At the bottom, there are "Start date:" and "End date:" fields with "YYYY-MM-DD" placeholders and "Clear" and "Apply" buttons. A note at the bottom right explains how to use the map to select a geographic area for a search.

To create a new geographic search coverage, use the buttons and input fields to enter coordinates below. The GPS button (top-left of wind rose) selects the area around your current location. For the map, select the viewport button (top-right of wind rose) and drag or zoom over the bounding rectangle on its borders. You can also select a date range by entering a start/end date. Press "Apply" to restrict current search results!



# Search via keywords

- start with any keyword in search panel
- refine with facet filter
  - some filters can be checked and unchecked: e.g. “Project”



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**Filter by...**

**Dataset Author**

- Nicolaus, Marcel (1903)
- Katlein, Christian (1867)
- Rohde, Jan (1776)
- Regnery, Julia (1775)
- Anhaus, Philipp (1767)
- Arndt, Stefanie (1760)
- Matero, Ilkka (1757)
- Lange, Benjamin Allen (1744)
- more...

**Dataset Publication Year**

- unpublished (14)
- 2024 (69)
- 2023 (2163)
- 2022 (1355)
- 2021 (447)
- 2020 (76)
- 2019 (2)

**Topic**

- Ecology (1144)
- Environmental Sciences (1144)
- Chemistry (190)
- Multidisciplinary Sciences (183)
- Organic Chemistry (115)
- Atmosphere (89)
- Inorganic Chemistry (76)
- Geosciences, Multidisciplinary (35)

**Project**

- MOSAiC (4126)
- AWI\_Seaice (2113)
- Project (214)
- AC3 (65)
- ARTMELT (270)
- iceSense (196)
- meereisportal.de (162)
- HAVOC (56)
- more...

**4126 datasets found on search for »MOSAiC« with facet filters**

< 1 2 3 4 5 6 7 8 9 10 >

**1. Stephens, M (2022):** Beryllium-7 concentrations in snow, ice, seawater, and aerosols during the MOSAiC expedition  
Size: 4 datasets  
<https://doi.org/10.1594/PANGAEA.945414> - Score: 31.93

**2. Stephens, M (2022):** Beryllium-7 concentrations in seawater during the MOSAiC expedition  
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<https://doi.org/10.1594/PANGAEA.940557> - Score: 26.58

**4. Stephens, M (2022):** Beryllium-7 concentrations in ice during the MOSAiC expedition  
Size: 187 data points  
<https://doi.org/10.1594/PANGAEA.945408> - Score: 26.55

**5. Stephens, M (2022):** Beryllium-7 concentrations in aerosols during the MOSAiC expedition  
Size: 98 data points  
<https://doi.org/10.1594/PANGAEA.945413> - Score: 26.34

**6. Heinemann, G (2022):** Regional climate model simulations (CCLM 15km) of near-surface variables for the MOSAiC winter period  
Related to: Heinemann, G; Schefczyk, L; Willmes, S et al. (2022): Evaluation of simulations of near-surface variables using the regional climate model CCLM for the MOSAiC winter period. *Elementa - Science of the Anthropocene*  
Size: 8 data points  
<https://doi.org/10.1594/PANGAEA.944502> - Score: 26.24

**7. Stephens, M (2022):** Beryllium-7 concentrations in snow during the MOSAiC expedition  
Size: 1204 data points  
<https://doi.org/10.1594/PANGAEA.945412> - Score: 26.03

**8. Haase, A; Hoppe, F (2021):** Internal stress raw data (Stress Logger HSV4) of sea ice during MOSAiC expedition, legs 1, 2 and 3  
Size: 334 data points  
<https://doi.org/10.1594/PANGAEA.926496> - Score: 25.82

**9. Li, T; Zhu, J; Zhai, L (2021):** Drift Towing Ocean Profiler (DTOP) data on sea ice, meteorological conditions and drift of sea ice from buoy 2019V5, deployed during MOSAiC 2019/20

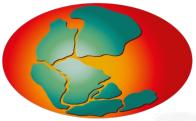
To create a new geographic search coverage, use the buttons and input fields to enter coordinates below. The GPS button (top-left of map rose) selects the area around your current location. For using the map, select the viewport button (top-right of map rose) and drag or zoom the bounding rectangle on its borders. You can also select a date range by entering a start/end date. Press "Apply" to restrict current search results!

Map Satellite

Google Map data ©2024 Imagery ©2024 NASA 1000 km

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Start date:  YYYY-MM-DD  Clear  
End date:  YYYY-MM-DD  Apply



# Search via keywords



Not logged in

- start with any keyword in search panel
- refine with facet filter
  - some filters can be checked and unchecked: e.g. “Project”
  - some filters can be selected and removed via upper left hand panel

PANGAEA.

ALL TOPICS MOSAIC

SEARCH SUBMIT HELP ABOUT CONTACT

Filter by... Arndt, Stefanie Polarstern

Dataset Author  
Nicolaus, Marcel (1743)  
Regnery, Julia (1737)  
Krampe, Daniela (1736)  
Matero, Ilkka (1736)  
Katiein, Christian (1731)  
Anhaus, Philipp (1727)  
Rohde, Jan (1724)  
Lange, Benjamin Allen (1722)  
more...

Dataset Publication Year  
 unpublished (1)  
 2023 (859)  
 2022 (888)  
 2021 (9)

Topic  
Ecology (1130)  
Environmental Sciences (1130)  
Chemistry (162)  
Organic Chemistry (93)  
Inorganic Chemistry (69)

Project  
 MOSAIC (1757)  
 MA\_Seaice (1728)  
 FRAM (1720)  
LANCE (10)  
meeresportal.de (7)  
HAVOC (2)  
SPPI158 (2)  
license (1)

Basis  
Akademik Fedorov (2)

Method/Device  
Remotely operated sensor platform BEAST (1720)  
Hyperpectral radiometer, TriOS Mess- und Datentechnik GmbH, RAMSES (412)  
Acoustic Doppler Current Profiling (ADCP), Nortek Aquadopp 2

1757 datasets found on search for »MOSAIC« with facet filters

< 1 2 3 4 5 6 7 8 9 10 >

1. Salganik, E; Hoppmann, M; Scholz, D et al. (2023): Temperature and heating induced temperature difference measurements from the sea ice mass balance buoy DTC44 during MOSAIC 2019/2020  
Related to: Lei, R; Hutchings, JK; Hoppmann, M et al. (2022): Temperature and heating induced temperature difference measurements from SIMBA-type sea ice mass balance buoy 2020T79, deployed during MOSAIC 2019/20.  
Salganik, E; Hoppmann, M; Scholz, D et al. (2023): Temperature and heating induced temperature difference measurements from Digital Thermistor Chains (DTCs) during MOSAIC 2019/20.  
Salganik, E; Hoppmann, M; Scholz, D et al. (2023): Updated positioning of Digital Thermistor Chains (DTCs) during MOSAIC 2019/20.  
Size: 3 datasets  
2 datasets  
<https://doi.org/10.1594/PANGAEA.962487> - Score: 19.74

2. Nicolaus, M; Arndt, S; Birnbaum, G et al. (2021): Visual panoramic photographs of the surface conditions during the MOSAIC campaign 2019/20  
Related to: Nicolaus, M; Perovich, DK; Spreen, G et al. (2022): Overview of the MOSAIC expedition: Snow and sea ice.  
Size: 35937 data points  
<https://doi.org/10.1594/PANGAEA.938534> - Score: 17.9

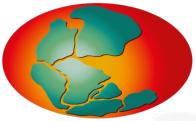
3. Nicolaus, M; Anhaus, P; Arndt, S et al. (2022): Spectral radiation fluxes, albedo and transmittance from autonomous measurement from Radiation Station 2020R13, deployed during MOSAIC 2019/20  
Size: 5 datasets  
<https://doi.org/10.1594/PANGAEA.948891> - Score: 17.23

4. Hoppmann, M; Scholz, D; Arndt, S et al. (2022): Temperature and heating induced temperature difference measurements from the sea ice mass balance buoy DTC26 during MOSAIC 2019/2020  
Related to: Granskog, MA; Berge, J; Cottier, F et al. (2021): Temperature and heating induced temperature difference measurements from the sea ice mass balance buoy 2020T61.  
Salganik, E; Hoppmann, M; Scholz, D et al. (2023): Temperature and heating induced temperature difference measurements from Digital Thermistor Chains (DTCs) during MOSAIC 2019/20.  
Salganik, E; Hoppmann, M; Scholz, D et al. (2023): Updated positioning of Digital Thermistor Chains (DTCs) during MOSAIC 2019/20.  
Size: 2 datasets  
2 datasets  
<https://doi.org/10.1594/PANGAEA.951780> - Score: 17.1

5. Anhaus, P; Katiein, C; Matero, I et al. (2023): Nitrate and UV-absorbance spectra from remotely operated vehicle (ROV) surveys during the MOSAIC expedition 2019/20  
Related to: Katiein, C; Schiller, M; Belter, HJ et al. (2017): A New Remotely Operated Sensor Platform for Interdisciplinary Observations under Sea Ice. *Frontiers in Marine Science*  
Nicolaus, M; Perovich, DK; Spreen, G et al. (2022): Overview of the MOSAIC expedition: Snow and sea ice.  
Size: 71 datasets  
<https://doi.org/10.1594/PANGAEA.953490> - Score: 16.68

Map Satellite   
Map   
Google   
Map data ©2024 Imagery ©2024 NASA 1000 km   
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End date: YYYY-MM-DD



# Search via keywords

- all keywords in search panel are automatically combined with “AND”



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ALL TOPICS MOSAiC "Arndt, Stefanie" Polarstern "Snow pit"

SEARCH SUBMIT HELP ABOUT CONTACT

Filter by...

Dataset Author  
Macfarlane, Amy R (19)  
Schneebeli, Martin (19)  
Arndt, Stefanie (18)  
Jaggi, Matthias (18)  
Ogger, Marc (17)  
Raphael, Ian (17)  
Dadic, Ruzica (16)  
Hammerle, Stefan (16)  
[more...](#)

Dataset Publication Year  
 2022 (14)  
 2021 (6)

Topic  
[Cryosphere](#) (1)

Project  
 2022 (20)  
 ARICE (17)  
 HAVOC (1)  
 SPPI158 (1)

Method/Device  
Snow pit (19)  
Olympus Tough TG-5 Camera (2)  
SnowMicroPen (2)  
Calculated after Dånsgaard (1964) (1)  
Camera, Near-Infrared (1)  
Corrected (1)  
Garmin GPSmap 62sc (GPS) (1)  
ice corer (1)  
[more...](#)

Campaign  
PS122/2 (18)  
PS122/3 (18)  
PS122/4 (18)  
PS122/5 (18)  
PS122/1 (15)

20 datasets found on search for »MOSAiC "Arndt, Stefanie" Polarstern "Snow pit"«

< | 1 | 2 | >

1. Itkin, P; Webster, M; Hendricks, S et al. (2021): Magnaprobe snow and melt pond depth measurements from the 2019-2020 MOSAiC expedition  
Size: 12 data points  
<https://doi.org/10.1594/PANGAEA.937781> - Score: 58.25

2. Mellat, M; Meyer, H; Brunello, CF et al. (2022): Stable water isotopes of snow during MOSAiC expedition  
Size: 2717 data points  
<https://doi.org/10.1594/PANGAEA.948511> - Score: 50.35

3. Wagner, DN; Jaggi, M; Macfarlane, AR et al. (2021): Snow water equivalent retrievals from SnowMicroPen data from MOSAiC Leg 1 - Leg 3  
Size: 9021 data points  
<https://doi.org/10.1594/PANGAEA.927460> - Score: 49.8

4. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2021): Snowpit raw data collected during the MOSAiC expedition  
Related to: Nicolaus, M; Perovich, DK; Spreen, G et al. (2022): Overview of the MOSAiC expedition: Snow and sea ice.  
Size: 15 datasets  
<https://doi.org/10.1594/PANGAEA.935934> - Score: 48.5

5. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022): Snowpit snow water equivalent collected with an ETH tube during the MOSAiC expedition  
Size: 29.9 kB/bytes  
<https://doi.org/10.1594/PANGAEA.940199> - Score: 43.93

6. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022): Snowpit temperature profiles measured during the MOSAiC expedition  
Size: 126.6 kB/bytes  
<https://doi.org/10.1594/PANGAEA.940200> - Score: 43.54

7. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022): Snow permittivity measured during the MOSAiC expedition  
Size: 38.5 kB/bytes  
<https://doi.org/10.1594/PANGAEA.940757> - Score: 42.84

8. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022): Snowpit salinity profiles during the MOSAiC expedition  
Size: 5157 data points  
<https://doi.org/10.1594/PANGAEA.946887> - Score: 42.12

9. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022): Snowpit metadata TXT files collected during the MOSAiC expedition

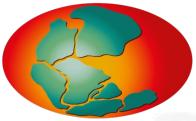
Map Satellite

Google Map data ©2024 Imagery ©2024 NASA 1000 km

To create a new geologic search coverage, use the buttons and input fields to enter coordinates below. The GPS button (top-left of map rose) selects the area around your current location. For using the map, select the viewport button (top-right of map rose) and drag or zoom the bounding rectangle on its borders. You can also select a date range by entering a start/end date. Press "Apply" to restrict current search results!

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Start date: YYYY-MM-DD   
End date: YYYY-MM-DD



# Search via keywords

- all keywords in search panel are automatically combined with “AND”
- NOTE: usage of search panel needs clear specification to gain same results as facet filter

result:

20 vs. 17

data sets

Not logged in

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PANGAEA.

ALL TOPICS

MOSAiC "Arndt, Stefanie" Polarstern "Snow pit"

x

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SUBMIT

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CONTACT

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Filter by...

Dataset Author

Macfarlane, Amy R (19)  
Schneebeli, Martin (19)  
Arndt, Stefanie (18)  
Jaggi, Matthias (18)  
Ogger, Marc (17)  
Raphael, Ian (17)  
Dadic, Ruzica (16)  
Hammerle, Stefan (16)  
[more...](#)

Dataset Publication Year

2022 (14)  
 2021 (6)

Topic

Cryosphere (1)

Project

MOSAiC (20)  
 ARICE (17)  
 HAIVOC (1)  
 SPUR158 (1)

Method/Device

Snow pit (19)  
Olympus Tough TG-5 Camera (2)  
SnowMicroPen (2)  
Calculated after Dånsgaard (1964) (1)  
Camera, Near-Infrared (1)  
Corrected (1)  
Garmin GPSmap 62sc (GPS) (1)  
ice corer (1)  
[more...](#)

Campaign

PS122/2 (18)  
PS122/3 (18)  
PS122/4 (18)  
PS122/5 (16)  
PS122/1 (15)

20 datasets found on search for »MOSAiC "Arndt, Stefanie"«

< | 1 | 2 | >

1. Itkin, P; Webster, M; Hendricks, S et al. (2021): Magnaprobe snow and melt pond depth measurements from the 2019-2020 MOSAiC expedition  
Size: 12 data points  
<https://doi.org/10.1594/PANGAEA.937781> - Score: 58.25
2. Mellat, M; Meyer, H; Brunello, CF et al. (2022): Stable water isotopes of snow during MOSAiC expedition  
Size: 2717 data points  
<https://doi.org/10.1594/PANGAEA.948511> - Score: 50.35
3. Wagner, DN; Jaggi, M; Macfarlane, AR et al. (2021): Snow water equivalent retrievals from SnowMicroPen data from MOSAiC Leg 1 - Leg 3  
Size: 9021 data points  
<https://doi.org/10.1594/PANGAEA.927460> - Score: 49.8
4. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2021): Snowpit raw data collected during the MOSAiC expedition  
Related to: Nicolaus, M; Perovich, DK; Spreen, G et al. (2022): Overview of the MOSAiC expedition: Snow and sea ice.  
Size: 15 datasets  
<https://doi.org/10.1594/PANGAEA.935934> - Score: 48.5
5. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022): Snowpit snow water equivalent collected with an ETH tube during the MOSAiC expedition  
Size: 29.9 kB/bytes  
<https://doi.org/10.1594/PANGAEA.940199> - Score: 43.93
6. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022): Snowpit temperature profiles measured during the MOSAiC expedition  
Size: 126.6 kB/bytes  
<https://doi.org/10.1594/PANGAEA.940200> - Score: 43.54
7. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022): Snow permittivity measured during the MOSAiC expedition  
Size: 38.5 kB/bytes  
<https://doi.org/10.1594/PANGAEA.940757> - Score: 42.84
8. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022): Snowpit salinity profiles during the MOSAiC expedition  
Size: 5157 data points  
<https://doi.org/10.1594/PANGAEA.946887> - Score: 42.12
9. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022): Snowpit metadata TXT files collected during the MOSAiC expedition

To create a new geospatial search coverage, use the buttons and input fields to enter coordinates below. The GPS button (top-left of wind rose) selects the area around your current location. For using the map, select the viewpoint button (top-right of wind rose) and drag or zoom the bounding rectangle on its borders. You can also select a date range by entering a start/end date. Press "Apply" to restrict current search results!

Map Satellite

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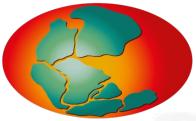
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S

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Start date: YYYY-MM-DD Clear

End date: YYYY-MM-DD Apply



# Search via keywords

PANGAEA.

ALL TOPICS ▾ MOSAiC "Arndt, Stefanie" Polarstern "Snow pit"

20 datasets found on search for »MOSAiC "Arndt, Stefani...«

< 1 2 >

1. Itkin, P; Webster, M; Hendricks, S et al. (2021): Magnaprobe snow and melt pond depth measurements from the 2019–2020 MOSAiC expedition

Size: 12 data points

<https://doi.org/10.1594/PANGAEA.937781> – Score: 58.25

2. Mellat, M; Meyer, H; Brunello, CF et al. (2022): Stable water isotopes of snow during MOSAiC expedition

Size: 2717 data points

<https://doi.org/10.1594/PANGAEA.948511> – Score: 50.35

3. Wagner, DN; Jaggi, M; Macfarlane, AR et al. (2021): Snow water equivalent retrievals from SnowMicroPen data from MOSAiC Leg 1 - Leg 3

Size: 9021 data points

<https://doi.org/10.1594/PANGAEA.927460> – Score: 49.8

4. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2021): Snowpit raw data collected during the MOSAiC expedition

Related to: Nicolaus, M; Perovich, DK; Spreen, G et al. (2022): Overview of the MOSAiC expedition: Snow and sea ice.

Size: 15 datasets

<https://doi.org/10.1594/PANGAEA.935934> – Score: 48.5

5. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022): Snowpit snow water equivalent collected with an ETH tube during the MOSAiC expedition

Size: 29.9 kBytes

<https://doi.org/10.1594/PANGAEA.940199> – Score: 43.93

6. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022): Snowpit temperature profiles measured during the MOSAiC expedition

Size: 126.6 kBytes

<https://doi.org/10.1594/PANGAEA.940200> – Score: 43.54

7. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022): Snow permittivity measured during the MOSAiC



PANGAEA.

ALL TOPICS ▾

Search for measurement type, au...

17 datasets found on search with facet filters

< 1 2 >

Filter by...

Arndt, Stefanie  Polarstern  Snow pit

#### Dataset Author

- Jaggi, Matthias (16)  
Kolabutin, Nikolai (16)  
Krampe, Daniela (16)  
Oggier, Marc (16)  
Raphael, Ian (16)  
Regnery, Julia (16)  
Shimanchuk, Egor (16)  
Wagner, David N (16)  
[more...](#)

#### Dataset Publication Year

- 2022 (12)  
 2021 (5)

#### Project

- MOSAiC (17)  
 ARICE (15)

#### Method/Device

- Olympus Tough TG-5 Camera (2)  
SnowMicroPen (2)  
Calculated after Dansgaard (1964) (1)  
Camera, Near-InfraRed (1)  
Corrected (1)  
Garmin GPSmap 62sc (GPS) (1)  
Ice corer (1)

1. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2021): Si...

Related to: Nicolaus, M; Perovich, DK; Spreen, G et al. (2022): Overview...

Size: 15 datasets

<https://doi.org/10.1594/PANGAEA.935934>

2. Mellat, M; Meyer, H; Brunello, CF et al. (2022): Stable wa...

Size: 2717 data points

<https://doi.org/10.1594/PANGAEA.948511>

3. Wagner, DN; Jaggi, M; Macfarlane, AR et al. (2021): Sn...

from MOSAiC Leg 1 - Leg 3

Size: 9021 data points

<https://doi.org/10.1594/PANGAEA.927460>

4. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022): Si...

expedition

Related to: Mellat, M; Meyer, H; Brunello, CF et al. (2022): Stable wa...

Size: 3510 data points

<https://doi.org/10.1594/PANGAEA.952556>

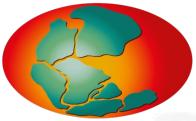
5. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022): Si...

Size: 5157 data points

<https://doi.org/10.1594/PANGAEA.946807>

6. Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022): Si...

expedition



# Search via keywords

keywords in search panel  
reflecting facet filter  
search

- project:mosaic
- citation:author:"arndt, stefanie"
- basis:polarstern
- method:"snow pit"

help under:

[https://wiki.pangaea.de/wiki/PANGAEA\\_search](https://wiki.pangaea.de/wiki/PANGAEA_search)



## PANGAEA.

ALL TOPICS

project:mosaic citation:author:"arndt, stefanie" basis:polarstern method:"snow pit"



17 datasets found on search for »project:mosaic citatio...«

< | 1 | 2 | >

1. **Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2021):** Snowpit raw data collected during the MOSAiC expedition

Related to: Nicolaus, M; Perovich, DK; Spreen, G et al. (2022): Overview of the MOSAiC expedition: Snow and sea ice.

Size: 15 datasets

<https://doi.org/10.1594/PANGAEA.935934> – Download – Score: 59.65

2. **Wagner, DN; Jaggi, M; Macfarlane, AR et al. (2021):** Snow water equivalent retrievals from SnowMicroPen data from MOSAiC Leg 1 - Leg 3

Size: 9021 data points

<https://doi.org/10.1594/PANGAEA.927460> – Download – Score: 51.51

3. **Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022):** Snow permittivity measured during the MOSAiC expedition

Size: 38.5 kBytes

<https://doi.org/10.1594/PANGAEA.940757> – Download – Score: 48.95

4. **Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022):** Snowpit height measurements during the MOSAiC expedition

Size: 33.3 kBytes

<https://doi.org/10.1594/PANGAEA.940215> – Download – Score: 48.81

5. **Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022):** Snowpit snow density cutter profiles measured during the MOSAiC expedition

Size: 68 kBytes

<https://doi.org/10.1594/PANGAEA.940214> – Download – Score: 48.81

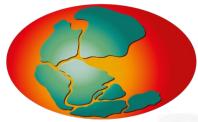
6. **Macfarlane, AR; Schneebeli, M; Dadic, R et al. (2022):** Snowpit surface type observed during the MOSAiC expedition

Size: 24.4 kBytes

Map

Google

To create a  
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right of wind  
can also sel  
current sea



# Help/Documentation



[https://wiki.pangaea.de/wiki/Main\\_Page](https://wiki.pangaea.de/wiki/Main_Page)

## PANGAEA Wiki

This wiki is a dynamic manual and reference for the data library **PANGAEA® - Data Publisher for Earth & Environmental Science**. <https://www.pangaea.de/> 

The **PANGAEA Wiki** is operated to support PANGAEA data providers and end-users in archiving, publishing and retrieving data. It is a reference & documentation user-guide for any questions and information related to PANGAEA and its operation.



## DATA SEARCH

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- [PANGAEA XML schema](#)





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ALL TOPICS ▾

Search for measurement type, author name, project, taxa,...

Topics:

- TOPIC
- MAP

Topics (grid):

LITHOSPHERE (50212)	BIOLOGICAL CLASSIFICATION (34277)	ATMOSPHERE (31691)	PALEONTOLOGY (25885)
OCEANS (22241)	ECOLOGY (20815)	LAND SURFACE (8440)	BIOSPHERE (4586)
CRYOSPHERE (1830)	LAKES & RIVERS (917)	HUMAN DIMENSIONS (929)	FISHERIES (659)
HEMISTRY (2434)			AGRICULTURE (751)

Latest News

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2024-01-08 HAPPY NEW YEAR! The PANGAEA Data Editorial Office has returned from winter break and started processing data submissions on 2024-01-08.

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Featured Data

Anhaus, P; Katselin, C; Mataro, I et al. (2023): Under-ice environment survey using a remotely operated vehicle (ROV) during the MOSAIC expedition 2019/20 <https://doi.org/10.1594/PANGAEA.931077>

Matevski, D; Glathorn, J; Foltran, EC (2022): Leaf damage on European beech leaves from saplings and mature trees from Lower Saxony, Germany in 2019 <https://doi.org/10.1594/PANGAEA.949421>

Zabel, M (2022): Pore water and solid phase data from deep trench sediments <https://doi.org/10.1594/PANGAEA.947269>

Hoppmann, M; Kuznetsov, I; Fang, Y-C et al. (2022): Processed data of CTD buoys 201901 to 201908 as part of the MOSAIC Distributed Network <https://doi.org/10.1594/PANGAEA.940320>

Dorschel, B; Hehemann, L; Viquerat, S et al. (2022): The International Bathymetric Chart of the Southern Ocean Version (IBCSO v2) <https://doi.org/10.1594/PANGAEA.937574>

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**ALL TOPICS**

Search for measurement type, author name, project, taxa,...

**TOPICS**

**MAP** **SATELLITE**



**North Atlantic Ocean**

**Latest News**

2024-01-24 **PANGAEA OPEN POSITION** Interested in data management and data infrastructures for your career? PANGAEA is looking for new co-worker!

2024-01-08 **HAPPY NEW YEAR!** The PANGAEA Data Editorial Office has returned from holiday season and started processing data submissions on 2024-01-08.

  
[Show all 71 news items...](#)

**Featured Data**

Anhaus, P; Katilein, C; Matero, I et al. (2023): Under-ice environment surveys using a remotely operated vehicle (ROV) during the MOSAIC expedition 2019/20   
<https://doi.org/10.1594/PANGAEA.951077>

Matewski, D; Glathorn, J; Foltran, EC (2022): Leaf damage data on European beech leaves from saplings and mature trees from Lower Saxony, Germany in 2019   
<https://doi.org/10.1594/PANGAEA.949421>

Zabel, M (2022): Pore water and solid phase data from deep-sea trench sediments   
<https://doi.org/10.1594/PANGAEA.947269>

Hopmann, M; Kunznetsov, I; Fang, Y-C et al. (2022): Processed data of CTD buoys 201901 to 201908 as part of the MOSAIC Distributed Network   
<https://doi.org/10.1594/PANGAEA.940320>

Dorschel, B; Hehemann, L; Viquerat, S et al. (2022): The International Bathymetric Chart of the Southern Ocean Version 2 (IBCSO v2)   
<https://doi.org/10.1594/PANGAEA.937574>

[Show all 52 featured data sets...](#)



# Search via map

- region is applied in facet filter
- further filtering possible

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SHOW MAP GOOGLE EARTH DATA WAREHOUSE

Map Satellite

North Atlantic Ocean

86761 datasets found on search with facet filters

< 1 2 3 4 5 6 7 8 9 10 >

1. Carrasco, R.; Horstmann, J.; Brix, H et al. (2024): Surface Drifter Data on the Elbe estuary: Positions of Lagrangian Heron Drifters deployed in German Bight during MOSES 2023  
Size: 12 datasets  
<https://doi.pangaea.de/10.1594/PANGAEA.965882>

2. O'Brien, P.J.; Barrenechea Angeles, I.; Cermakova, K et al.: Foraminiferal and environmental variable data of Ifedjorden (2020) sediment surface samples from stations REF, IF20-12, IF20-10, IF20-18, IF20-01 and IF20-04  
Size: 4 datasets  
<https://doi.pangaea.de/10.1594/PANGAEA.965583>

3. Romans, BW; Parent, C; Chilton, K et al. (2024): Terrigenous grain size (sortable silt) and detrital provenance (Hf, Nd, Pb/Pb) data, Eocene-Oligocene, Newfoundland ridges drifts, IODP Sites 342-U1406 and 342-U1411  
Size: 5 datasets  
<https://doi.pangaea.de/10.1594/PANGAEA.965577>

4. Baumann, K-H: Coccolith species abundances in sediment cores 162-984C, 162-980, GeoB11035-1, GeoB5546-2, M35003-4 and GeoB3104-1 from the North Atlantic Ocean for the past 24 ka  
Size: 6 datasets  
<https://doi.pangaea.de/10.1594/PANGAEA.965722>

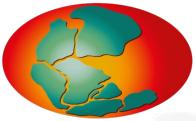
5. Melbourne, L; Goodkin, NF: Morphological and Density measurements for blue mussels (*Mytilus edulis*) along the east coast of the US  
Size: 5 datasets  
<https://doi.pangaea.de/10.1594/PANGAEA.965715>

6. De Entrambasaguas, J.; Westerhold, T; Jones, H: Stable isotopes of benthic foraminifera and calcareous nannofossils from ODP Site 171-1053  
Size: 4 datasets  
<https://doi.pangaea.de/10.1594/PANGAEA.965594>

7. Pieck, D; Hillebrand, H; Kleyer, M et al.: Continuous temperature observations in surface sediment within DynaCom experimental islands and saltmarsh enclosed plots at different elevation levels, Spiekeroog, Germany, 2021-01 to 2021-12  
Related to: Pieck, D; Thölen, C; Hillebrand, H et al. (2021): Continuous temperature observations in surface sediment within DynaCom experimental islands and saltmarsh enclosed plots at different elevation levels, Spiekeroog, Germany, 2020-01 to 2020-12.  
Zielinski, O; Meier, D; Löhmus, K et al. (2018): Environmental conditions of a salt-marsh biodiversity experiment on the island of Spiekeroog (Germany). *Earth System Science Data*  
Size: 9 datasets  
<https://doi.pangaea.de/10.1594/PANGAEA.965367>

To refine a new geographic search coverage, use the buttons and input fields to enter coordinates, use the button (top-left of wind rose) selects the area around your current location. For using the map, select the viewport button (top-right of wind rose) and drag or zoom the bounding rectangle on its borders. You can also select a date range by entering a start/end date. Press "Apply" to restrict current search results!

Start date: YYYY-MM-DD Clear End date: YYYY-MM-DD Clear Apply



# Search via geographical coordinates

- select bounding box
- optional: select time range
- **Note:** time range of data
- **Not:** year of publication as in facet filter

Not logged in

PANGAEA.

SEARCH SUBMIT HELP ABOUT CONTACT

ALL TOPICS Search for measurement type, author name, project, taxa,...

Filter by...

Dataset Author

- Tippenhauer, Sandra (14)
- Brix, Holger (13)
- Bussmann, Ingeborg (13)
- Carrasco, Ruben (13)
- Floßer, Götz (13)
- Hoppmann, Mario (13)
- Horstmann, Jochen (13)
- Knap, Wolter (13)
- more...

Dataset Publication Year

- unpublished (16)
- 2024 (54)
- 2023 (89)
- 2022 (2)
- 2020 (1)
- 2017 (2)
- 2016 (2)

Topic

- Chemistry (16)
- Organic Chemistry (16)
- Animals (12)
- Atmosphere (12)
- Biological Classification (12)
- Cnidaria (10)
- Ecology (4)
- Environmental Sciences (4)
- more...

Project

- AWI\_PhysOce (16)
- MOSES (14)
- BSRN (13)
- DAK\_Underway (13)
- Helmholtz\_ChangingEarth (13)
- IAPLantic (12)
- AWI\_Seaice (5)
- IABP (5)
- more...

166 datasets found on search with geographic bounding box and temporal coverage

< 1 2 3 4 5 6 7 8 9 10 >

1. Carrasco, R; Horstmann, J; Brix, H et al. (2024): Surface Drifter Data on the Elbe estuary: Positions of Lagrangian Heron Drifters deployed in German Bight during MOSES 2023  
Size: 12 datasets  
<https://doi.pangaea.de/10.1594/PANGAEA.965882>

2. Bittmann, F (2023): Archaeobotanical analyses of kitchen waste of Jever Castle, 17th/18th century  
Related to: Bittmann, F; Grimm, J; Sander, A (2013): Tischlein deck dich! Küchenabfälle des 17./18. Jahrhunderts als Dokument höfischen Lebens im Schloss zu Jever, Landkreis Friesland. Offa  
Size: 4 datasets  
<https://doi.org/10.1594/PANGAEA.962169>

3. Knap, W (2022): Basic and other measurements of radiation at station Cabauw (2005-02 et seq)  
Size: 228 datasets  
<https://doi.pangaea.de/10.1594/PANGAEA.940531>

4. Teyssié, A; Rouffaer, LO; Saleh Hudin, N et al. (2017): House sparrows (*Passer domesticus*) gut microbiota composition according to urbanisation gradient  
Supplement to: Teyssié, A; Rouffaer, LO; Saleh Hudin, N et al. (2018): Inside the guts of the city: Urban-induced alterations of the gut microbiota in a wild passerine. *Science of the Total Environment*  
Size: 4 datasets  
<https://doi.pangaea.de/10.1594/PANGAEA.883741>

5. Haas, C (2024): Master tracks in different resolutions during POLAR 5 campaign P5\_242\_IceBird\_Summer\_2023  
Size: 14 datasets  
<https://doi.org/10.1594/PANGAEA.964350>

6. Bachmeyer, R (2024): Master tracks in different resolutions of HEINCKE cruise HE629, Stavanger - Bremerhaven, 2023-10-03 - 2023-10-11  
Size: 2318 data points  
<https://doi.pangaea.de/10.1594/PANGAEA.964735>

7. Tippenhauer, S; Hoppmann, M; Lahajnar, N (2023): Physical oceanography during RV HEINCKE cruise HE619  
Related to: Lahajnar, N; Bartsch, P; Dreyer, L et al. (2023): Marine-Geological Practical Training at Sea Master Course LV 63-245, Cruise No. HE619, May 10 - May 16, 2023, Bremerhaven (Germany) - Bremerhaven (Germany). HEINCKE-Berichte, Begutachtungspapier *Forschungsschiff*  
Size: 70297 data points  
<https://doi.pangaea.de/10.1594/PANGAEA.963441>

8. Lahajnar, N (2023): Master tracks in different resolutions of HEINCKE cruise HE619, Bremerhaven - Bremerhaven, 2023-05-10 - 2023-05-16  
Size: 1732 data points

Map Satellite

Google

To create a new geographic search coverage, use the buttons and input fields to enter coordinates below. The GPS button (top-left of wind rose) selects the area around your current location. For using the map, select the viewport button (top-right of wind rose) and drag or zoom the bounding rectangle on the world map. You can also select a date range by entering a start/end date. Press "Apply" to restrict current search results!

75

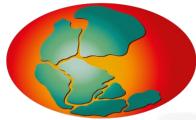
-40

20

Clear 50 Apply

Start date: 2023-01-01 Clear

End date: 2023-12-31 Apply



# Search via geographical coordinates



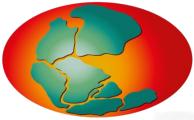
- select bounding box
- optional: select time range
- **Note:** time range of data
- **Not:** year of publication as in facet filter

To create a new geographic search coverage, use the buttons and input fields to enter coordinates below. The GPS button (*top-left of wind rose*) selects the area around your current location. For using the map, select the viewport button (*top-right of wind rose*) and drag or zoom the bounding rectangle on its borders. You can also select a date range by entering a start/end date. Press "Apply" to restrict current search results!

A screenshot of a geographic search interface. At the top are four input fields: 'N' (top), 'S' (bottom), 'E' (right), and 'W' (left). In the center is a green compass rose. Below the compass rose are three buttons: 'Clear' (left), 'Apply' (right), and a small square icon (top-right). The entire interface is set against a background of a world map.

Start date:

End date:



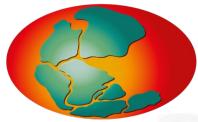
# Quiz



## Question



1. How many datasets are found for the project PAGES\_C-Peat?



# Solution: 760



1. How many datasets are found for the project PAGES\_C-Peat?

The screenshot shows the PANGAEA search interface. At the top, there is a logo, a search bar containing 'C-Peat', and a search button. Below the search bar, a message indicates '760 datasets found on search for »C-Peat« with facet filters'. A navigation bar below the message shows page numbers from 1 to 10. The main content area displays two dataset entries:

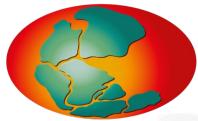
**1. van Bellen, S (2021): Geochemistry of Mosaik C (MOS\_C) peat core from Canada**  
Abstract: Geochemistry data of a high-resolution peat core from the Past Global Changes - Carbon in Peat on EArth through Time (PAGES\_C-PEAT) Project.  
Size: 1200 data points  
DOI: <https://doi.org/10.1594/PANGAEA.928378> – Score: 77.21

**2. van Bellen, S (2021): Calibrated ages of Lac Le Caron (LLC\_C) peat core from Canada**  
Abstract: Calibrated ages of a high-resolution peat core from the Past Global Changes - Carbon in Peat on EArth through Time (PAGES\_C-PEAT) Project.  
Size: 1962 data points  
DOI: <https://doi.org/10.1594/PANGAEA.929910> – Score: 77.18

**Filter by...** (dropdown menu)

**Dataset Author**  
Garneau, Michelle (80)  
van Bellen, Simon (51)  
Charman, Dan J (42)  
Marchant, Robert (38)  
Yu, Zicheng (37)  
Camill, Philip (34)  
Gallego-Sala, Angela V (28)  
Swindles, Graeme T (26)  
more...

**Project**  
 PAGES\_C-PEAT (760)  
AWI Envi (11)  
more...



# Solution: 760



1. How many datasets are found for the project PAGES\_C-Peat?

The screenshot shows the PANGAEA search interface. At the top, there is a search bar with the query "project:label:PAGES\_C-Peat". Below the search bar, a teal header bar displays the text "760 datasets found on search for »project:label:PAGES\_C-...«". Below this, a navigation bar contains page numbers from 1 to 10, with the number 1 highlighted in a teal box. To the left, a sidebar titled "Dataset Author" lists various authors with their counts: Garneau, Michelle (80), van Bellen, Simon (51), Charman, Dan J (42), Marchant, Robert (38), Yu, Zicheng (37), Camill, Philip (34), and Gallego-Sala, Angela V (28). The main content area lists two datasets:

- 1. van Bellen, S (2021):** Geochemistry of Lac Le Caron (LLC\_L1) peat core from Canada  
*Abstract:* Geochemistry data of a high-resolution peat core from the Past Global Changes - Carbon in Peat on EARTH through Time (PAGES\_C-PEAT) Project.  
*Size:* 1100 data points  
<https://doi.org/10.1594/PANGAEA.928250> – Score: 6.51
- 2. Swindles, GT (2022):** Age determination of Dead Island bog (DI-1) peat core from northern Ireland

## Dataset Author

Garneau, Michelle (80)

van Bellen, Simon (51)

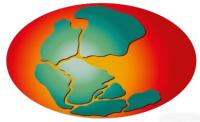
Charman, Dan J (42)

Marchant, Robert (38)

Yu, Zicheng (37)

Camill, Philip (34)

Gallego-Sala, Angela V (28)



## Question



1. How many datasets are found for the project PAGES\_C-Peat?
2. How many of these have “Geochemistry” in the dataset title?



# Solution: 267



1. How many datasets are found for the project PAGES\_C-Peat?
2. How many of these have “Geochemistry” in the dataset title?

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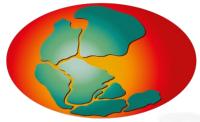
ALL TOPICS ▼ project:label:PAGES\_C-Peat citation:title:Geochemistry × 

267 datasets found on search for »project:label:PAGES\_C-Peat citation:title:Geochemistry«

< 1 2 3 4 5 6 7 8 9 10 >

1. **MacDonald, GM (2018):** Geochemistry of V34\_core1 peat core  
Size: 128 data points  
 <https://doi.org/10.1594/PANGAEA.890537> – Score: 16.47

2. **Kokfelt, U (2018):** Geochemistry of Stordalen peat core  
Size: 1653 data points



## Question



1. How many datasets are found for the project PAGES\_C-Peat?
2. How many of these have “Geochemistry” in the dataset title?
3. How many of these are located between 50N to 70N, 60W to 10E?



## Solution: 19



1. How many datasets are found for the project PAGES\_C-Peat?
2. How many of these have “Geochemistry” in the dataset title?
3. How many of these are located between 50N to 70N, 60W to 10E?



## PANGAEA.

ALL TOPICS ▼

project:label:PAGES\_C-Peat citation:title:Geochemistry

x Q

19 datasets found on search for »proj



70



-60

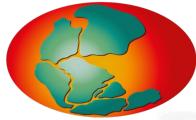


10

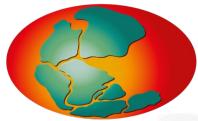
Clear

50

Apply



# How to download datasets



# Download of individual datasets



Kathrin Riemann-Campe



Pahnke, Katharina; Schlundt, Michael; Badewien, Thomas H; Voß, Daniela; Henkel, Rohan (2023): Continuous thermosalinograph oceanography along RV SONNE cruise track SO290. PANGAEA, <https://doi.org/10.1594/PANGAEA.959029>

## Citation:

Pahnke, Katharina; Schlundt, Michael; Badewien, Thomas H; Voß, Daniela; Henkel, Rohan (2023): Continuous thermosalinograph oceanography along RV SONNE cruise track SO290. PANGAEA, <https://doi.org/10.1594/PANGAEA.959029>

Always quote citation above when using data! You can download the citation in several formats below.

RIS Citation BibTeX Citation Copy Citation Facebook Twitter Show Map Google Earth  
 

## Abstract:

Underway temperature and salinity data was collected along the cruise track with two autonomous measurement systems, called self-cleaning monitoring boxes (SMBs). Usually, the SMBs are changed after ~12 hours. While temperature is taken at the water inlet in about 4 m depth, salinity is estimated within the SMB from conductivity and interior temperature. No temperature and salinity calibration were performed. For details to all processing steps see Data Processing Report.

## Related to:

Pahnke, Katharina; Lamy, Frank (2022): Paleoceanography of the southern Tasman Sea and glaciation history of the South Island, New Zealand, Cruise No. SO290, April 15 - May 12, 2022, Nouméa (New Caledonia) - Nouméa (New Caledonia). SONNE-Berichte, Begutachtungspanel Forschungsschiffe, SO290, 70 pp +163 App, [https://doi.org/10.48433/cr\\_so290](https://doi.org/10.48433/cr_so290)

## Data processing report:

Standard operating procedure:

## Further details:

Schlundt, Michael (2023): Continuous thermosalinograph oceanography along RV SONNE cruise track SO290 - Data Processing Report. GEOMAR - Helmholtz Centre for Ocean Research Kiel, [DAM\\_DataProcessingReport\\_SO290.pdf](#)

SO290 salinity samples

## Project(s):

DAM Underway Research Data (DAM\_Underway)

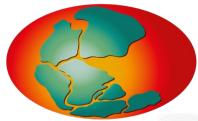


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# Download of individual datasets



Kathrin Riemann-Campe



Pahnke, Katharina; Schlundt, Michael; Badewien, Thomas H; Voß, Daniela; Henkel, Rohan (2023): Continuous thermosalinograph oceanography along RV SONNE cruise track SO290. PANGAEA, <https://doi.org/10.1594/PANGAEA.959029>

## Citation:

Pahnke, Katharina; Schlundt, Michael; Badewien, Thomas H; Voß, Daniela; Henkel, Rohan (2023): Continuous thermosalinograph oceanography along RV SONNE cruise track SO290. PANGAEA, <https://doi.org/10.1594/PANGAEA.959029>

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[RIS Citation](#) [BibTeX Citation](#) [Copy Citation](#) [Facebook](#) [Twitter](#) [Show Map](#) [Google Earth](#)  
 

## Abstract:

Underway temperature and salinity data was collected along the cruise track with two autonomous measurement systems, called self-cleaning monitoring boxes (SMBs). Usually, the SMBs are cleaned after ~12 hours. While temperature is taken at the water inlet in about 4 m depth, salinity is estimated within the SMB from conductivity and interior temperature. No temperature and salinity calibration were performed. For details to all processing steps see Data Processing Report.

## License:

 Creative Commons Attribution 4.0 International (CC-BY-4.0)

## Status:

Curation Level: Enhanced curation (CurationLevelC)  \* Processing Level: PANGAEA data processing level 2 (ProcLevel2) 

## Size:

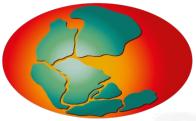
220070 data points

## Download Data

Download dataset as tab-delimited text — use the following character encoding:

View dataset as HTML (shows only first 2000 rows)





# Download of dataset collections

## Publication Series

example:

**Tippenhauer, Sandra (2023):**  
Collection of CTD raw data files of RV POLARSTERN cruises since PS122, September 2019. *Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA*, <https://doi.org/10.1594/PANGAEA.958949>

### Citation:

**Tippenhauer, Sandra (2023):** Collection of CTD raw data files of RV POLARSTERN cruises since PS122, September 2019 [dataset publication series]. *Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA*, <https://doi.org/10.1594/PANGAEA.958949>

Always quote citation above when using data! You can download the citation in several formats below.

[RIS Citation](#) [BibTeX Citation](#) [Copy Citation](#) [Facebook](#) [Twitter](#)  
[Show Map](#) [Google Earth](#)  

### Abstract:

This data collection contains the CTD raw data files of RV POLARSTERN cruises from 2019-09-20 (starting with PS122) to today. The collection is regularly updated with data from new campaigns. If data was processed and published here on Pangaea, it is linked to the raw data of a respective cruise. Navigate to the respective cruise and see link to "Other version". Previous CTD raw data was collected in Rohardt (2017) for the time range 2013-06-08 (PS81) to 2019-09-13 (PS121) which can be found here <https://doi.org/10.1594/PANGAEA.852715>.



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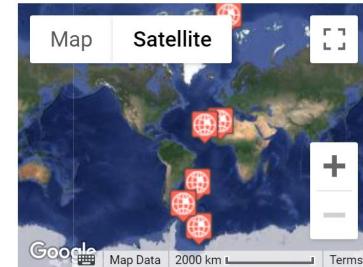
Data Publisher for Earth & Environmental Science

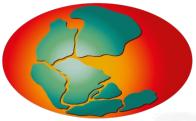


Kathrin Riemann-Campe



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# Download of dataset collections

## Publication Series

example:

**Tippenhauer, Sandra (2023):** Collection of CTD raw data files of RV POLARSTERN cruises since PS122, September 2019.

*Alfred Wegener Institute,  
Helmholtz Centre for Polar  
and Marine Research,  
Bremerhaven, PANGAEA,  
<https://doi.org/10.1594/PANGAEA.958949>*



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**Citation:** Tippenhauer, Sandra (2023): Collection of CTD raw data files of RV POLARSTERN

**Project(s):** Physical Oceanography @ AWI (AWI\_PhysOce)

**Coverage:** Median Latitude: -3.087261 \* Median Longitude: -16.749929 \* South-bound Latitude: -77.191960 \* West-bound Longitude: -92.985530 \* North-bound Latitude: 82.897101 \* East-bound Longitude: 16.318966  
Date/Time Start: 2021-02-08T11:54:27 \* Date/Time End: 2023-02-26T12:05:57

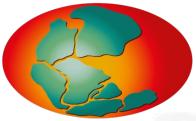
**License:** Creative Commons Attribution 4.0 International (CC-BY-4.0)

**Size:** 7 datasets

**Download Data**  
 Download ZIP file containing all datasets as tab-delimited text — use the following character encoding:

Datasets listed in this publication series

1. Tippenhauer, S; Hellmer, HH (in review): Raw data of physical oceanography during RV POLARSTERN cruise PS124. <https://doi.pangaea.de/10.1594/PANGAEA.964349>
2. Tippenhauer, S; Hoppmann, M; McPherson, R et al. (2023): Raw data of physical oceanography during RV POLARSTERN cruise PS126. <https://doi.org/10.1594/PANGAEA.940754>
3. Tippenhauer, S; Dreutter, S; Hanfland, C (2022): Raw data of physical oceanography during RV POLARSTERN cruises PS130/1 and PS130/2. <https://doi.org/10.1594/PANGAEA.957843>
4. Tippenhauer, S; Hoppmann, M; von Appen, W-J et al. (2023): Raw data of physical oceanography during RV POLARSTERN cruise PS131. <https://doi.org/10.1594/PANGAEA.956136>
5. Tippenhauer, S; Wiltshire, KH (2023): Raw data of physical oceanography during RV POLARSTERN cruise PS132. <https://doi.org/10.1594/PANGAEA.962346>
6. Tippenhauer, S; Klaas, C; Kasten, S (2023): Raw data of physical oceanography during RV POLARSTERN cruises PS133/1 and PS133/2. <https://doi.org/10.1594/PANGAEA.962314>
7. Tippenhauer, S; Gohl, K (2023): Raw data of physical oceanography during RV POLARSTERN cruise PS134. <https://doi.org/10.1594/PANGAEA.962405>

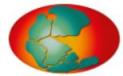


# Download of binary data

Example: images

**Purser, Autun;  
Boehringer, Lilian;  
Hehemann, Laura;  
Wenzhöfer, Frank  
(2021): Seabed  
photographs taken  
along OFOS profile  
PS124\_21-7 during  
POLARSTERN cruise  
PS124 [dataset].  
PANGAEA,  
[https://doi.org/10.1594/  
PANGAEA.932826](https://doi.org/10.1594/PANGAEA.932826)**

Citation:



**PANGAEA.**

Data Publisher for Earth & Environmental Science



SEARCH SUBI

**Purser, Autun; Boehringer, Lilian; Hehemann, Laura; Wenzhöfer, Frank (2021): Seabed photographs taken along OFOS profile PS124\_21-7 during POLARSTERN cruise PS124 [dataset]. PANGAEA,**  
DOI: <https://doi.org/10.1594/PANGAEA.932826>,

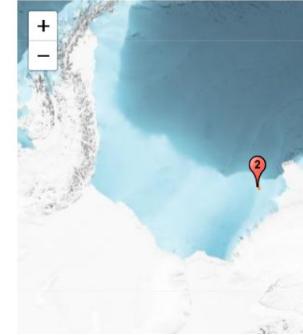
In: Purser, A et al. (2021): Ocean Floor Observation and Bathymetry System (OFOBS) images of Neopagetopsis ionah ice fish nest arrays in the Filchner Trough, Antarctica collected during the PS124 Polarstern expedition [dataset publication series]. PANGAEA, DOI: <https://doi.org/10.1594/PANGAEA.932827>

Always quote citation above when using data! You can download the citation in several formats below.

Published: 2021-06-18 • DOI registered: 2022-02-11

RIS Citation BibTeX Citation Copy Citation Share Show Map Google Earth

180 145 13



Parameter(s):

#	Name	Short Name	Unit	Principal Investigator	Method/Device	Comment
1	DATE/TIME			Purser, Autun		Geocode
2	LATITUDE			Purser, Autun		Geocode
3	LONGITUDE			Purser, Autun		Geocode
4	DEPTH, water		m	Purser, Autun		Geocode
5	Image	IMAGE		Purser, Autun		
6	Binary Object	Binary		Purser, Autun		



# Download of binary data



Example: images

**Purser, Autun;  
Boehringer, Lilian;  
Hehemann, Laura;  
Wenzhöfer, Frank  
(2021): Seabed  
photographs taken  
along OFOS profile  
PS124\_21-7 during  
POLARSTERN cruise  
PS124 [dataset].  
PANGAEA,  
[https://doi.org/10.1594/  
PANGAEA.932826](https://doi.org/10.1594/PANGAEA.932826)**

Citation:



**PANGAEA.**

Data Publisher for Earth & Environmental Science

SEARCH SUBI

**Purser, Autun; Boehringer, Lilian; Hehemann, Laura; Wenzhöfer, Frank (2021): Seabed photographs taken along OFOS profile PS124\_21-7 during POLARSTERN cruise PS124 [dataset]. PANGAEA,**  
DOI: <https://doi.org/10.1594/PANGAEA.932826>,  
*In:* Purser, A et al. (2021): Ocean Floor Observation and Bathymetry System (OFOBS) images of Neopagetopsis ionah ice fish nest arrays in the Filchner Trough, Antarctica collected during the PS124 Polarstern expedition [dataset publication series]. PANGAEA, DOI: <https://doi.org/10.1594/PANGAEA.932827>

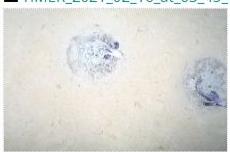
Always quote citation above when using data! You can download the citation in several formats below.

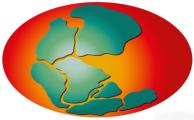
Published: 2021-06-18 • DOI registered: 2022-02-11

## Data

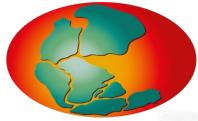
[Download dataset as tab-delimited text](#) — use the following character encoding: UTF-8: Unicode (PANGAEA default)

All files referred to in data matrix can be downloaded in one go as [ZIP](#) or [TAR](#). Be careful: This download can be very large! To protect our systems from misuse, we require to sign up for an user account before downloading.

1 ⓘ Date/Time	2 ⓘ Latitude	3 ⓘ Longitude	4 ⓘ Depth water [m]	5 ⓘ IMAGE	6 ⓘ Binary
2021-02-16T03:45:42	-74.86862600	-30.66506400	507		<a href="#">TIMER_2021_02_16_at_03_45_42_IMG_0037.JPG</a> <a href="#">TIMER_2021_02_16_at_03_45_42_IMG_0037.txt</a>



# Time for questions



**Let's have a break!**

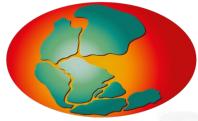


## Breakout sessions after lunch



Downloading and manipulating PANGAEA data in Python

Downloading and manipulating PANGAEA data in R



# Introduction to pangaear



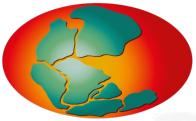
# pangaear: open source package



- R package **developed and maintained by rOpenSci**
- Data retrieval interface for PANGAEA
- Download and documentation on GitHub and CRAN:
  - <https://github.com/ropensci/pangaear>
  - <https://CRAN.R-project.org/package=pangaear>



Scott Chamberlain, Kara Woo, Andrew MacDonald, Naupaka Zimmerman and Gavin Simpson (2021).  
pangaear: Client for the 'Pangaea' Database. R package version 1.1.0.  
<https://CRAN.R-project.org/package=pangaear>



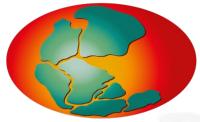
# Why pangaear?



- ✓ Direct data queries and retrieval via R
- ✓ Enables automated workflows and data mining
- ✓ Reproducible workflow and record of data retrieval
- ✓ Easier bulk download of data
- ✓ Metadata search and analysis



Credit: Gregor  
Cesnar



# Getting started



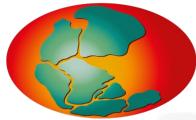
Install *pangaear* in your environment

```
install.packages('pangaear')
```

Import packages

```
library(pangaear)
```



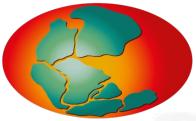


# Two essential commands



Function	Description
pg_search	Search the Pangaea database (arguments: e.g. count, offset)
pg_data	Download data from Pangaea

... and others ...



# pg\_search

This mirrors the query via the [PANGAEA website](#)



RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Workshop\_scripts.R

```
1 # install.packages('pangaear')
2 # install.packages('dplyr')
3 library(pangaear) # see package details at https://github.com/ropensci/pangaear
4 library(dplyr) # set of tools for data manipulation, see details at https://dplyr.tidyverse.org
5
6 #===== 1. SEARCH (by PROJECT) =====
7 # Documentation of PANGAEA search: https://wiki.pangaea.de/wiki/PANGAEA\_search
8 # Website: https://www.pangaea.de/?q=project:label:PAGES\_C-PEAT
9 # search with pg_search: maximum = 500 records (set with count, continue with offset)
10 PAGES <- pg_search("project:label:PAGES_C-PEAT", count = 1000)
11 PAGES1 <- pg_search("project:label:PAGES_C-PEAT", count = 500)
12 PAGES2 <- pg_search("project:label:PAGES_C-PEAT", count = 500, offset = 500)
13
14 PAGES_all <- rbind(PAGES1, PAGES2)
15
16
```

14:1 1. SEARCH (by PROJECT) R Script

Console Terminal Background Jobs

R 4.3.0 . ~/

```
> library(pangaear)
Registered S3 method overwritten by 'httr':
  method           from
  print.cache_info hoardr
> #===== 1. SEARCH (by PROJECT) =====
> # Documentation of PANGAEA search: https://wiki.pangaea.de/wiki/PANGAEA\_search
> # Website: https://www.pangaea.de/?q=project:label:PAGES\_C-PEAT
> # search with pg_search: maximum = 500 records (set with count, continue with offset)
> PAGES <- pg_search("project:label:PAGES_C-PEAT", count = 1000)
> PAGES1 <- pg_search("project:label:PAGES_C-PEAT", count = 500)
> PAGES2 <- pg_search("project:label:PAGES_C-PEAT", count = 500, offset = 500)
> |
```

Project: (None)

Environment History Connections Tutorial

Data

PAGES	500 obs. of 6 variables
PAGES1	500 obs. of 6 variables
PAGES2	375 obs. of 6 variables

Files Plots Packages Help Viewer Presentation

R: Search the Pangaea database Find in Topic

pg\_search {pangaear} R Documentation

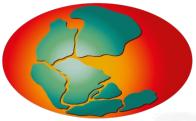
## Search the Pangaea database

### Description

Search the Pangaea database

### Usage

```
pg_search(
  query,
  count = 10,
  offset = 0,
  topic = NULL,
  bbox = NULL,
```



# pg\_data



RStudio

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Workshop\_scripts.R

```
21 #===== 2. GET DATA =====
22 # download single dataset (randomly selected from the search result above)
23 # pg_data returns list, data table -> data frame
24 Joey_core12 <- pg_data(doi="10.1594/PANGAEA.890405")
25 Joey_core12 <- Joey_core12[[1]][["data"]]
26
27 # create a folder for download
28 getwd()
29 dir.create(path="R/Files")
30 folderpath <- "R/Files/"
31
32 # write table as txt file
33 # paste function: concatenate vectors by converting them into character (list
34 write.table(Joey_core12, file=paste0(folderpath,"Joey_core12.txt"), row.names=
35
36
```

25:1 2. GET DATA

Console Terminal Background Jobs

R 4.3.0 ~/

```
[Workspace loaded from ~/.RData]

> library(pangaear)
Registered S3 method overwritten by 'httr':
  method           from
  print.cache_info hoardr
> ===== 2. GET DATA =====
> # download single dataset (randomly selected from the search result above)
> # pg_data returns list, data table -> data frame
> Joey_core12 <- pg_data(doi="10.1594/PANGAEA.890405")
Downloading 1 datasets from 10.1594/PANGAEA.890405
Processing 1 files
> |
```

Environment History Connections Tutorial

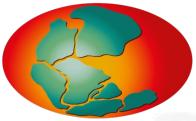
Project: (None)

Global Environment

Joey\_core12 List of 1

```
$ :List of 7
..$ parent_doi: chr "10.1594/PANGAEA.89...
..$ doi      : chr "10.1594/PANGAEA.89...
..$ citation  : chr "Camill, Philip (20...
..$ url      : chr "https://doi.org/10...
..$ path     : chr "C:\\Users\\FLAVIA~...
..$ metadata :List of 9
...$ citation      : chr "Camill, Ph...
...$ related_to    : chr "Camill, Ph...
...$ further_details: chr "Camill, Ph...
...$ projects       : chr "Past Globa...
...$ coverage        : chr "LATITUDE: ...
...$ events          :List of 8
....$ Joey_core12 : chr NA
....$ LATITUDE     : chr "55.470000"
....$ LONGITUDE    : chr "-98.15000...
....$ ELEVATION     : chr "214.0 m"
....$ Recovery       : chr "155 cm"
....$ LOCATION       : chr "Canada"
....$ METHOD/DEVICE: chr "Peat core...
....$ COMMENT        : chr "Coring ye...
...$ parameters     :List of 6
....$ : chr [1:3] "DEPTH, sediment/...
....$ : chr [1:4] "AGE Tka BP1 (Ae...
```

Files Plots Packages Help Viewer Presentation



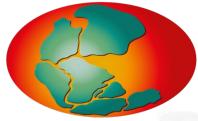
# Example R-scripts



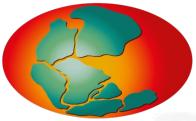
<https://github.com/pangaea-data-publisher/community-workshop-material>

```
# Search for species 'Arenicola marina' using its unique semantic URI, see WoRMS database https://www.marinespecies.org/aphia.php?p=taxdetails&id=129868
res2 <- pg_search(query = 'urn:lsid:marinespecies.org:taxname:129868', count = 100)
```

- Filter search results and get multiple datasets
- Download multiple binary files (e.g., images, netCDF format, etc.)



# Introduction to pangaeapy



# pangaeapy: open source package



1. Developed and maintained by PANGAEA staff

2. But anyone can contribute, see

<https://pypi.org/project/pangaeapy/>

3. Report issues on [GitHub](#)

Robert Huber, Egor Gordeev, Markus Stocker, Aarthi Balamurugan, & Uwe Schindler (2020). pangaeapy - a Python module to access and analyse PANGAEA data. Zenodo. <http://doi.org/10.5281/zenodo.4013940>.

**pangaeapy 1.0.22**

pip install pangaeapy

Released: Feb 11, 2025

This module allows to download and analyse metadata as well as data from tabular PANGAEA (<https://www.pangaea.de>) datasets. Usage: import pangaeapy.pandataset as pd ds = pd.PanDataSet(787140) print(ds.title) print(ds.data.head()) Please visit the github project page to see more documentation and some examples: <https://github.com/pangaea-data-publisher/pangaeapy>

**Navigation**

- Project description**
- Release history
- Download files

---

**Verified details** These details have been [verified by PyPI](#)

**Maintainers**

- nselke
- pangaea

---

**Unverified details** These details have **not** been verified by PyPI

**Project links**

**Project description**

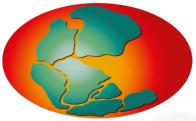
DOI: [10.5281/zenodo.4013941](https://doi.org/10.5281/zenodo.4013941)

pangaeapy - a Python module to access and analyse PANGAEA data

**Background**

PANGAEA (<https://www.pangaea.de>) is one of the world's largest archives of this kind offering essential data services such as data curation, long-term data archiving and data publication. PANGAEA hosts about 400,000 datasets comprising around 17.5 billion individual measurements (Aug. 2020) and observations which have been collected during more than 240 international research projects. The system is open to any project, institution or individual scientist using, archiving or publishing research data.

Since the programming languages Python and R have become increasingly important for scientific data analysis in recent years, we have developed 'pangaeapy' a new, custom Python module that considerably simplifies typical data science tasks.



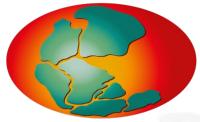
# Why pangaeapy?



- ✓ Direct data queries and retrieval via Python
- ✓ Easier bulk download of data
- ✓ Metadata search and analysis
- ✓ Enables automated workflows and data mining
- ✓ Reproducible workflow and record of data retrieval



Credit: Gregor  
Cesnar



# Getting started



Install *pangaeapy* in your environment

```
pip install pangaeapy
```

Import packages

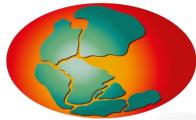
```
import pangaeapy as pan
```

or

```
from pangaeapy.panquery import PanQuery
```

```
from pangaeapy.pandataset import PanDataSet
```





# Two essential commands



Function	Attributes
pan.PanQuery('search term')	totalcount, result

Example: `query = pan.PanQuery("Triticum")`  
`query.result`

	URI	score	html
0	doi:10.1594/PANGAEA.896784	20.516336	<li><div class="citation"><a href="https://doi...
1	doi:10.1594/PANGAEA.886727	18.917538	<li><div class="citation"><a href="https://doi...
2	doi:10.1594/PANGAEA.925261	18.777039	<li><div class="citation"><a href="https://doi...
3	doi:10.1594/PANGAEA.886725	18.592678	<li><div class="citation"><a href="https://doi...



# Two essential commands



## Function

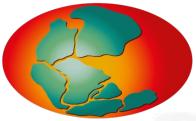
```
pan.PanDataSet('PANGAEA ID')
```

## Attributes

data, id, uri, doi, title, abstract, year, authors, citation, parameters, events, min-/maxtimeextent, children, etc.

Example: `ds = PanDataSet("doi:10.1594/PANGAEA.923033")  
ds.data`

	Event	ID	Project	Access no gen	Access no gen_2	Campaign	Date/Time
0	HUD16/19_010	WB-00001	PRJNA613976	insdc:SRR11365522	NaN	Hudson2016-019	2016-07-20 16:30:12
1	HUD16/19_010	WB-00005	PRJNA613976	insdc:SRR11365520	NaN	Hudson2016-019	2016-07-20 16:30:12
2	HUD16/19_010	WB-00007	PRJNA613976	insdc:SRR11365519	NaN	Hudson2016-019	2016-07-20 16:30:12



# Documentation



[https://pangaea-data-publisher.github.io/pangaeapy/how\\_to.html](https://pangaea-data-publisher.github.io/pangaeapy/how_to.html)

pangaeapy  
1.1.1.dev9+g0e632  
c1 documentation

Search

User Guide

How To

API Documentation

## How To

We always assume you have imported `PanDataSet` as

```
from pangaeapy import PanDataSet
```

### Download a specific file from a binary data set

Go to the landing page of the data set (e.g. <https://doi.pangaea.de/10.1594/PANGAEA.956151>), click on the “View dataset as HTML” button and get the row index (starting from 0) and the column name.

```
ds = PanDataSet(956151, enable_cache=True, cachedir='/your/cache/path')
filenames = ds.download(indices=[3], columns=["Binary"])
```

### Download all files from a binary data set

Create a user account at [PANGAEA](#) and copy your bearer token from your [user page](#).

```
ds = PanDataSet(956151, enable_cache=True,
                cachedir='/your/cache/path',
                auth_token='your_personal_bearer_token')
filenames = ds.download()
```



Note

For tabular data sets no bearer token is required.

# How about access restricted datasets?

# Bearer Tokens

Following “cookie monster” illustrations by Till Born (*predic8: Microservices, APIs & Integration*):  
<https://www.predic8.de/bearer-token-autorisierung-api-security.htm>





GET /kekse





GET /kekse

401 Bearer Realm





GET /kekse

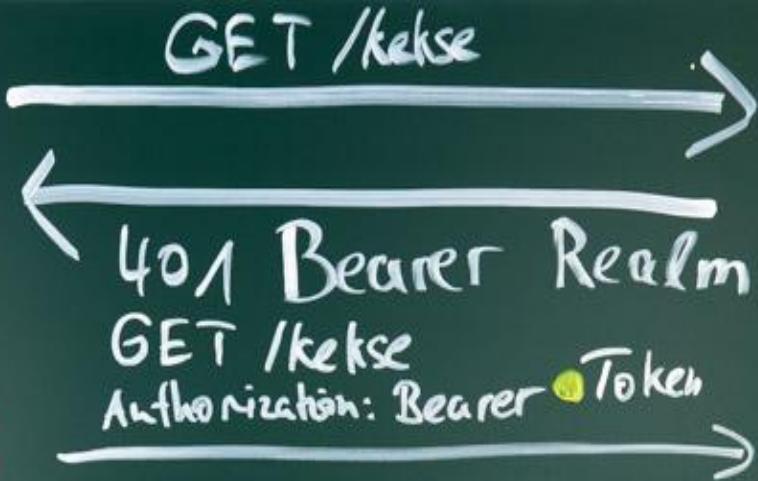
← 401 Bearer Realm

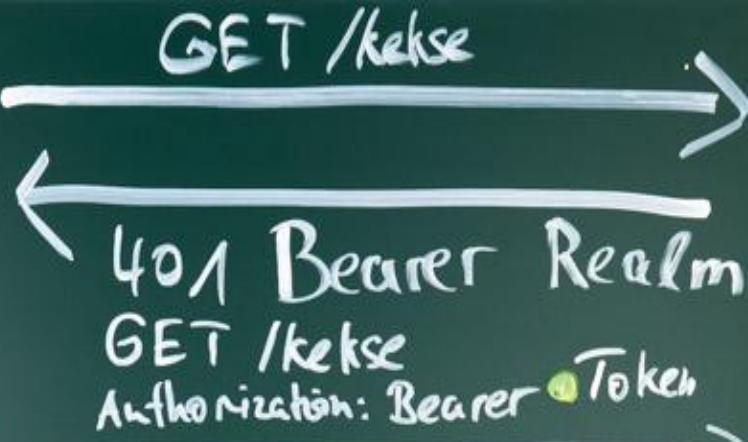


POST/ausgabe user/bud









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SEARCH SUBMIT HELP ABOUT CONTACT

## Your temporary login token

PANGAEA allows to download protected datasets and access APIs using a *bearer token*. Your current login session is using the following token: `u7f14y4y42lyan3azebox73uskqm5m3kqypbhityro4rfijgtpbfoyz4kkn1v4`

The token can be passed as "`Authorization: Bearer u7f14y4y42lyan3azebox73uskqm5m3kqypbhityro4rfijgtpbfoyz4kkn1v4`" header with HTTP requests to PANGAEA's APIs. For example, it can be used to download a protected dataset with `curl`:

```
$ curl -OJLf -H'Authorization: Bearer u7f14y4y42lyan3azebox73uskqm5m3kqypbhityro4rfijgtpbfoyz4kkn1v4' -H'Accept
```

Please read our [Interoperability / Services](#) page and our [Wiki](#) for more information about PANGAEA's APIs.

### Log in with username and password

User Name / E-mail:

Password:

[Lost password?](#)

[Log in](#)

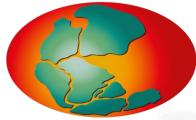
### Your temporary login token

PANGAEA allows to download protected datasets and access APIs using a *bearer token*. Your current login session is using the following token: `u7f14y4y42lyan3azebox73uskqm5m3kqypbhityro4rfijgtpbfoyz4kkn1v4`

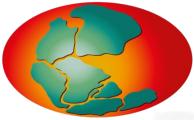
The token can be passed as "`Authorization: Bearer u7f14y4y42lyan3azebox73uskqm5m3kqypbhityro4rfijgtpbfoyz4kkn1v4`" header with HTTP requests to PANGAEA's APIs. For example, it can be used to download a protected dataset with `curl`:

```
$ curl -OJLf -H'Authorization: Bearer u7f14y4y42lyan3azebox73uskqm5m3kqypbhityro4rfijgtpbfoyz4kkn1v4' -H'Accept
```

Please read our [Interoperability / Services](#) page and our [Wiki](#) for more information about PANGAEA's APIs.



**Time for your questions!**



# Let's have a break!

See you after lunch at 14:00