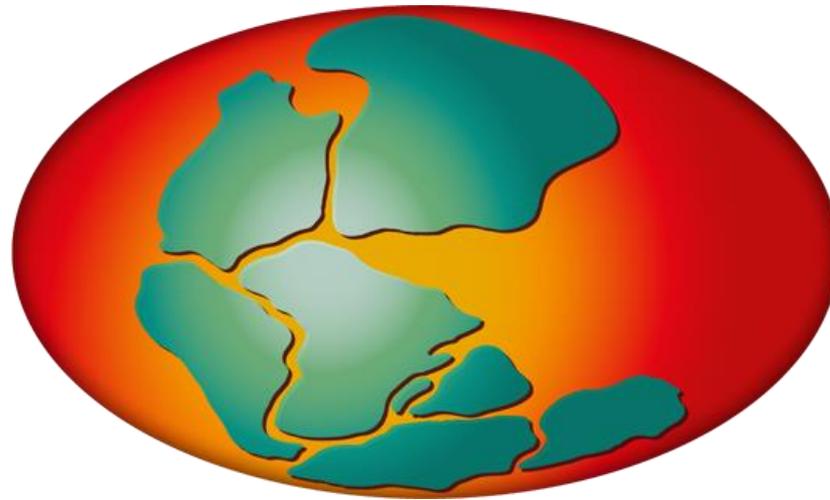
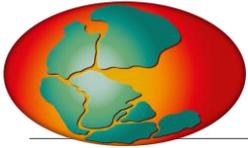


# PANGAEA Data Publisher for Earth & Environmental Science **INTERACT Workshop 2022**



**Amelie Driemel, PANGAEA Team**  
2022-05-12

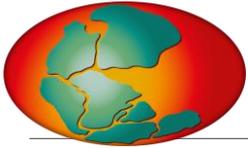


# Overview

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- Data publication – why?
- PANGAEA
- Data submission/publication in PANGAEA
- Data search in PANGAEA
- New feature in PANGAEA: dataset statistics



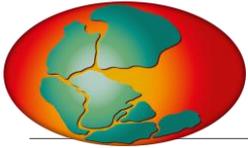
# Why should I publish my data?



## Easy to loose data...

1. Delete the file, no backup
2. Computer virus/Malware/Malfuction in software
3. Server is reorganized => links to data change
4. Theft/loss (PC/USB/ext. drive)
5. Damaged hardware
6. You just forget about your data when you move to another position

...and/or associated metadata...



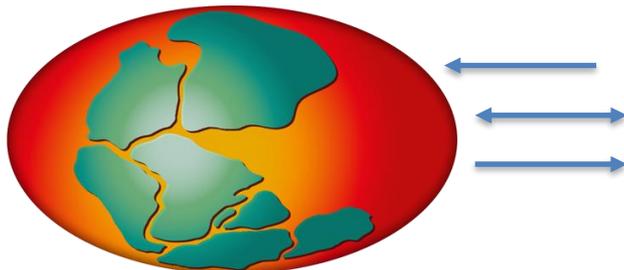
- [www.PANGAEA.de](http://www.PANGAEA.de) is an open access Data Publisher for Earth and Environmental Sciences (data + metadata!)
- 
- Your data are stored **georeferenced** in space and time
  - Your datasets receive a **citable and permanent DOI**
  - Your datasets can be **found** via the internet and can be **downloaded** from the PANGAEA web page (**moratorium possible!**)

## Our Data Holdings

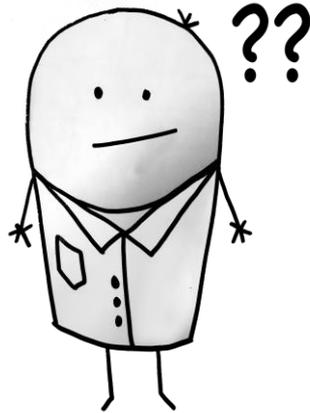
**712**  
Projects

**410,575**  
Datasets

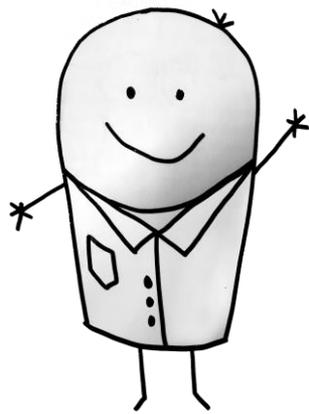
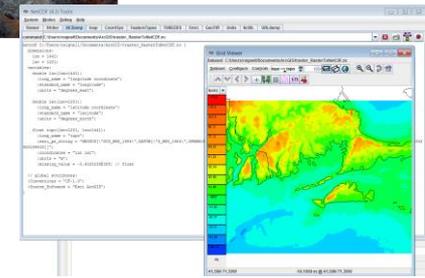
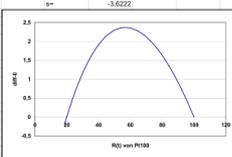
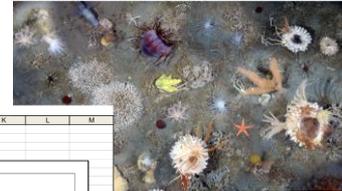
**21,075,949,190**  
Measurements



# This is life..

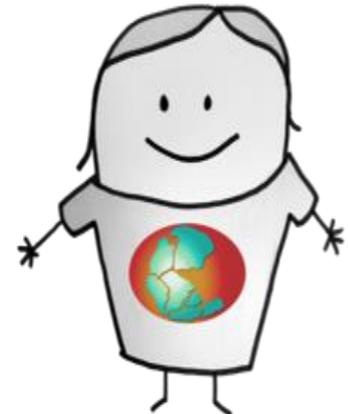
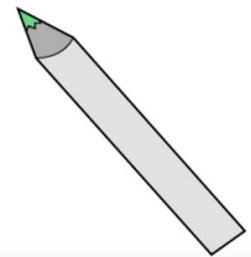


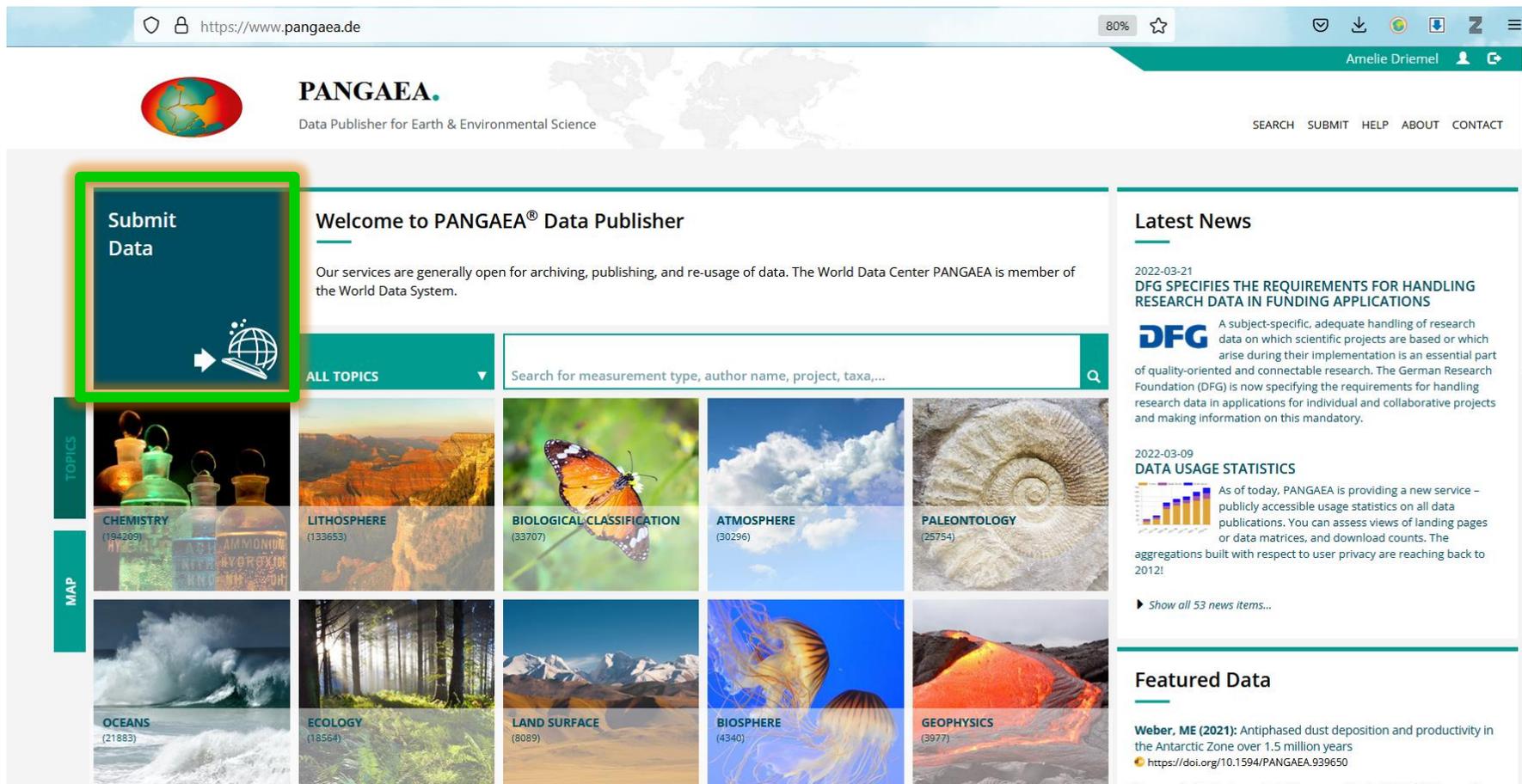
A	B	C	D	E	F	G	H	I	J	K	L	M
1	Linearisierung von P1100			a=	0.0039983			b=	5.876506			
2	Bereich: 2000+0			b=	-5.776507			c=	-0.00246844			
3				a**	-4.183E-12			d=	0.22936416			
4	T in Grad Cel	R in 100	150	Ordnung	dB0	Tkorr1	dB0P2	dBP2				
5	-200	18.52008	-200.196364	-0.196364	-200.00106			1.1236E-06				
6	-190	22.024803	-189.617985	0.382015	-189.996838			0.003162	9.9962E-06			
7	-180	27.066428	-179.124244	0.879796	-179.996303			0.008447	1.1506E-05			
8	-170	31.330549	-168.709981	1.290203	-169.996093			0.003907	1.5266E-05			
9	-160	35.643272	-158.370203	1.620791	-159.996099			0.001491	2.2216E-05			
10	-150	39.7231844	-148.190284	1.899791	-150.000207			-0.002037	4.1494E-05			
11	-140	43.6764344	-137.890763	2.134237	-140.008723			-0.006123	3.7491E-05			
12	-130	48.0047538	-127.752448	2.247562	-130.010243			-0.010243	0.00010482			
13	-120	52.1097191	-117.89639	2.233981	-120.019303			-0.018192	0.00019484			
14	-110	56.193506	-107.833892	2.266108	-110.016762			-0.016762	0.00028164			
15	-100	60.259584	-97.661488	2.246512	-100.018482			-0.018482	0.00034161			
16	-90	64.2995863	-87.716043	2.2839951	-90.018852			-0.018852	0.00035552			
17	-80	68.3264895	-77.834485	2.1768919	-80.0177897			-0.0177897	0.00031807			
18	-70	72.3454339	-67.874181	2.0208818	-70.0163337			-0.0163337	0.00025222			
19	-60	76.3279436	-58.1625486	1.8374834	-60.0117033			-0.0117033	0.00019897			
20	-50	80.3626819	-48.3879138	1.6184862	-50.0078415			-0.0078415	5.2439E-05			
21	-40	84.279652	-38.6470466	1.3529534	-40.0024709			-0.0024709	6.1358E-05			
22	-30	88.2216586	-28.8384183	1.0608917	-30.9981138			-0.0018662	3.3057E-05			
23	-20	92.1598884	-19.2614488	0.7368812	-19.9950444			0.0049506	2.4568E-05			
24	-10	96.0898879	-9.81700495	0.30269595	-9.99436025			0.00564375	1.1802E-05			
25	0	100	0	0	0.00286603			0.00286603	7.0772E-06			
26									0.00218413			



## Checklist

- the final dataset
- information about geolocation
- a title for your dataset
- list of authors of your dataset
- tentative citation of article





The screenshot shows the PANGAEA website homepage. At the top, there is a navigation bar with the PANGAEA logo, the text "PANGAEA. Data Publisher for Earth & Environmental Science", and a search bar. A user profile for "Amelie Driemel" is visible in the top right. Below the navigation bar, there is a main content area with a "Submit Data" button highlighted in a green box. The main content area includes a "Welcome to PANGAEA® Data Publisher" section, a search bar, and a grid of topic categories. On the right side, there is a "Latest News" section with two news items and a "Featured Data" section with one data item.

**Submit Data**

**Welcome to PANGAEA® Data Publisher**

Our services are generally open for archiving, publishing, and re-usage of data. The World Data Center PANGAEA is member of the World Data System.

**ALL TOPICS**

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

**TOPICS**

- CHEMISTRY** (184209)
- LITHOSPHERE** (133653)
- BIOLOGICAL CLASSIFICATION** (33707)
- ATMOSPHERE** (30296)
- PALEONTOLOGY** (25754)
- OCEANS** (21883)
- ECOLOGY** (18564)
- LAND SURFACE** (8089)
- BIOSPHERE** (4340)
- GEOPHYSICS** (3977)

**MAP**

**Latest News**

2022-03-21  
**DFG SPECIFIES THE REQUIREMENTS FOR HANDLING RESEARCH DATA IN FUNDING APPLICATIONS**

**DFG** A subject-specific, adequate handling of research data on which scientific projects are based or which arise during their implementation is an essential part of quality-oriented and connectable research. The German Research Foundation (DFG) is now specifying the requirements for handling research data in applications for individual and collaborative projects and making information on this mandatory.

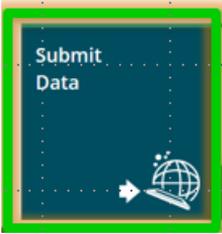
2022-03-09  
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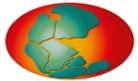
► Show all 53 news items...

**Featured Data**

**Weber, ME (2021):** Antiphased dust deposition and productivity in the Antarctic Zone over 1.5 million years  
► <https://doi.org/10.1594/PANGAEA.939650>



# Data submission form



**PANGAEA.**

Data Publisher for Earth & Environmental Science

SEARCH SUBMIT HELP ABOUT CONTACT

1 Basics

2 References

3 Projects and Grants

4 Upload

5 Submit

## Basic Information

Title\*

Title max length: 200 chars

The title should ideally reflect what has been measured, observed, or calculated, when, where, and how.

Authors\*

✚ Driemel Amelie amelie.driemel@awi.de Website ✖

+ Add author

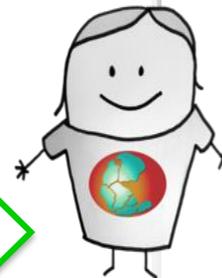
Please, enter the author(s) (the principal investigators) for the data set(s) you want to submit.

Keywords

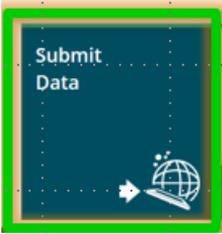
diatom; ice core; Antarctica; south westerly wind;

Press 'Enter' to create a keyword.

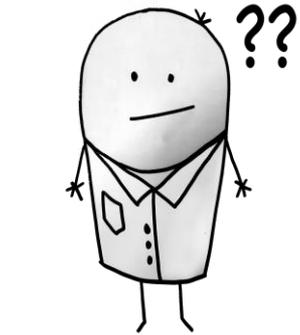
Abstract/Describe your Data\*



PANGAEA  
Data Curator



# Data submission process



Did I do it right??

Looks good, but units ... are missing ;)

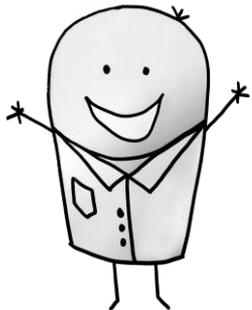
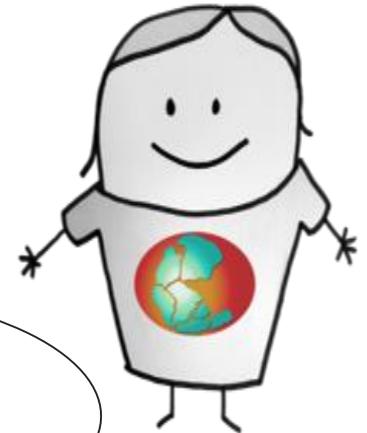
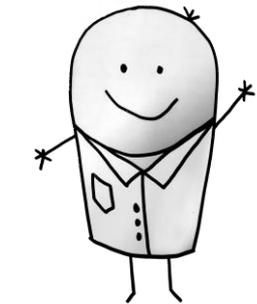
Oops, ok will upload a new version

The new version looks very good!



I uploaded your data, please proof-read at ...

Great, looks good, please keep moratorium until...





*Citation:*

**Cable, William L.; Tautz, Frieder; Schreiber, Peter; Martin, Julia; Lange, Stephan; Boike, Julia (2020):** Snow depth measurements collected 2019-04-06 with a magnetic snow depth probe: Samoylov transect, west to east, western half. *PANGAEA*, doi <https://doi.org/10.1594/PANGAEA.920816>,  
*In:* Cable, WL et al. (2020): Lena Delta 2019 Magnetic Snow Depth Probe data. *PANGAEA*, doi <https://doi.org/10.1594/PANGAEA.920716>

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](#)



*Keyword(s):*

GNSS [Q](#); GPS [Q](#); snow depth [Q](#)

*Further details:*

[Dataset description](#) [Q](#)  
[Overview of all measurement points: transect 20190406 \(image in png format\)](#) [Q](#)

*Project(s):*

[Modular Observation Solutions for Earth Systems \(MOSES\)](#) [Q](#)  
[Permafrost Research \(AWL\\_Perma\)](#) [Q](#)

*Coverage:*

*Median Latitude:* 72.374293 \* *Median Longitude:* 126.473603 \* *South-bound Latitude:* 72.370873 \* *West-bound Longitude:* 126.450867 \* *North-bound Latitude:* 72.375130 \* *East-bound Longitude:* 126.487511  
*Date/Time Start:* 2019-04-06T07:47:00 \* *Date/Time End:* 2019-04-06T09:53:00  
*Minimum ELEVATION:* -6.7 m a.s.l. \* *Maximum ELEVATION:* 12.9 m a.s.l.

*Event(s):*

**Lena2019\_mSDP\_20190406** [Q](#) \* *Latitude Start:* 72.374649 \* *Longitude Start:* 126.450867 \* *Latitude End:* 72.370873 \* *Longitude End:* 126.476906 \* *Date/Time Start:* 2019-04-06T07:47:00 \* *Date/Time End:* 2019-04-06T09:53:00 \* *Elevation Start:* -5.1 m \* *Elevation End:* 10.5 m \* *Campaign:* RU-Land\_2019\_Lena (Lena 2019) [Q](#) \* *Basis:* AWI Arctic Land Expedition [Q](#)

*Parameter(s):*

#	Name	Short Name	Unit	Principal Investigator	Method/Device	Comment
1	<a href="#">DATE/TIME</a> <a href="#">Q</a>	Date/Time		<a href="#">Cable, William L.</a> <a href="#">Q</a>	GNSS Receiver (GNSS) <a href="#">Q</a>	<a href="#">Geocode - UTC</a>
2	<a href="#">LATITUDE</a> <a href="#">Q</a>	Latitude		<a href="#">Cable, William L.</a> <a href="#">Q</a>	GNSS Receiver (GNSS) <a href="#">Q</a>	<a href="#">Geocode - degrees</a>
3	<a href="#">LONGITUDE</a> <a href="#">Q</a>	Longitude		<a href="#">Cable, William L.</a> <a href="#">Q</a>	GNSS Receiver (GNSS) <a href="#">Q</a>	<a href="#">Geocode - degrees</a>
4	<a href="#">ELEVATION</a> <a href="#">Q</a>	Elevation	m a.s.l.	<a href="#">Cable, William L.</a> <a href="#">Q</a>	GNSS Receiver (GNSS) <a href="#">Q</a>	<a href="#">Geocode</a>
5	<a href="#">Latitude, error</a> <a href="#">Q</a>	Latitude e	m	<a href="#">Cable, William L.</a> <a href="#">Q</a>	GNSS Receiver (GNSS) <a href="#">Q</a>	
6	<a href="#">Longitude, error</a> <a href="#">Q</a>	Longitude e	m	<a href="#">Cable, William L.</a> <a href="#">Q</a>	GNSS Receiver (GNSS) <a href="#">Q</a>	
7	<a href="#">Elevation, error</a> <a href="#">Q</a>	Elevation e	m	<a href="#">Cable, William L.</a> <a href="#">Q</a>	GNSS Receiver (GNSS) <a href="#">Q</a>	
8	<a href="#">Snow depth</a> <a href="#">Q</a>	Snow depth	cm	<a href="#">Cable, William L.</a> <a href="#">Q</a>	Magnetic snow depth probe (mSDP) <a href="#">Q</a>	

*License:*

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

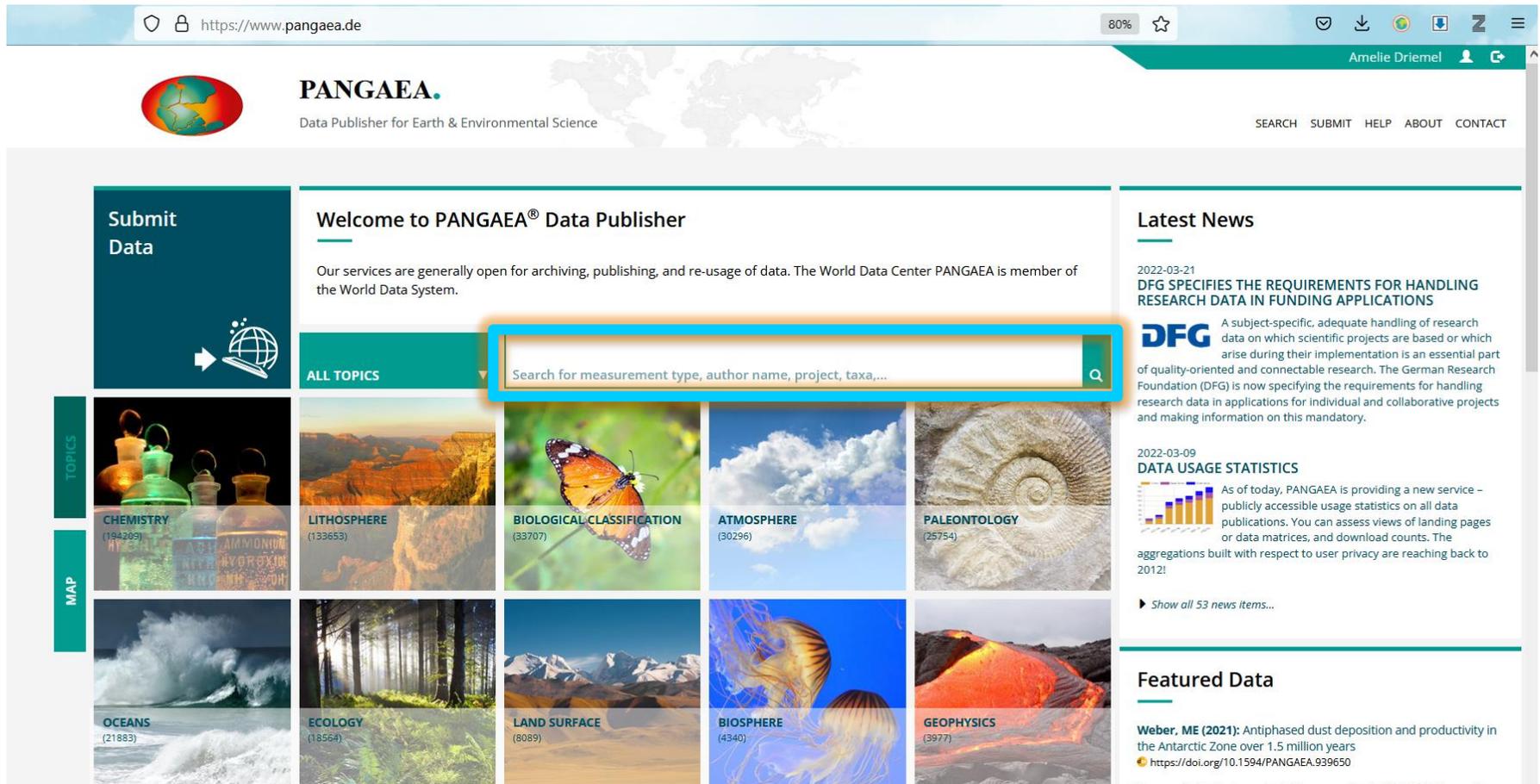
*Size:*

716 data points

**Download Data**

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

[View dataset as HTML](#)

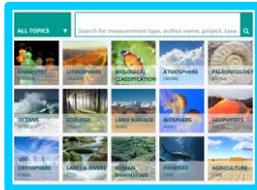


The screenshot shows the PANGAEA website homepage. At the top, there is a browser address bar with the URL <https://www.pangaea.de>. The website header includes the PANGAEA logo, the text "PANGAEA. Data Publisher for Earth & Environmental Science", and a navigation menu with links for SEARCH, SUBMIT, HELP, ABOUT, and CONTACT. A user profile for "Amelie Driemel" is visible in the top right corner.

The main content area is divided into several sections:

- Submit Data:** A dark green button with a globe icon and a right-pointing arrow.
- Welcome to PANGAEA® Data Publisher:** A section with a heading and a paragraph: "Our services are generally open for archiving, publishing, and re-usage of data. The World Data Center PANGAEA is member of the World Data System."
- Search Bar:** A search input field with the placeholder text "Search for measurement type, author name, project, taxa,..." and a magnifying glass icon. The search bar is highlighted with a blue border.
- ALL TOPICS:** A grid of 10 topic cards, each with a representative image, a title, and a count in parentheses:
  - CHEMISTRY** (184209): Image of laboratory glassware.
  - LITHOSPHERE** (133653): Image of a desert landscape.
  - BIOLOGICAL CLASSIFICATION** (33707): Image of a monarch butterfly.
  - ATMOSPHERE** (30296): Image of a blue sky with white clouds.
  - PALEONTOLOGY** (25754): Image of a fossil ammonite shell.
  - OCEANS** (21883): Image of ocean waves.
  - ECOLOGY** (18564): Image of a forest.
  - LAND SURFACE** (8089): Image of a snowy mountain range.
  - BIOSPHERE** (4340): Image of jellyfish.
  - GEOPHYSICS** (3977): Image of a volcanic eruption.
- Latest News:** A section with two news items:
  - 2022-03-21 DFG SPECIFIES THE REQUIREMENTS FOR HANDLING RESEARCH DATA IN FUNDING APPLICATIONS:** A subject-specific, adequate handling of research data on which scientific projects are based or which arise during their implementation is an essential part of quality-oriented and connectable research. The German Research Foundation (DFG) is now specifying the requirements for handling research data in applications for individual and collaborative projects and making information on this mandatory.
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- Featured Data:** A section with one featured data item:
  - Weber, ME (2021):** Antiphased dust deposition and productivity in the Antarctic Zone over 1.5 million years. <https://doi.org/10.1594/PANGAEA.939650>

# Search for data



PANGAEA.

ALL TOPICS

@INTERACT

SEARCH SUBMIT HELP ABOUT CONTACT

Amelie Driemel

Filter by...

437 datasets found on search for »@INTERACT«

SHOW MAP GOOGLE EARTH DATA WAREHOUSE

Dataset Author

Dataset Publication Year

Topic

Project

Basis

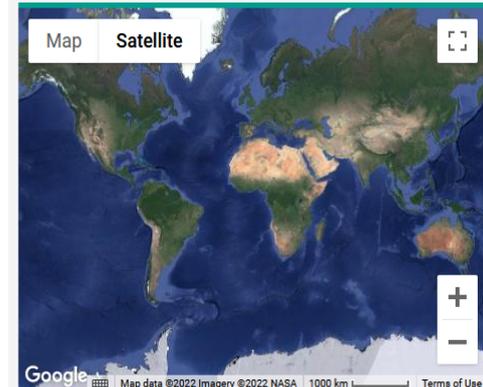
Method/Device

Campaign

Location

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

- Muster, S; Langer, M; Heim, B et al. (2012):** Land cover classification of Samoylov Island and Landsat subpixel water cover of Lena River Delta, Siberia, with links to ESRI grid files  
*Supplement to:* **Muster, S; Langer, M; Heim, B et al. (2012):** Subpixel heterogeneity of ice-wedge polygonal tundra: a multi-scale analysis of land cover and evapotranspiration in the Lena River Delta, Siberia. *Tellus Series B-Chemical and Physical Meteorology*  
Size: 2 datasets  
<https://doi.org/10.1594/PANGAEA.786927> - Score: 1.8
- Fedorova, IV; Bolshiyarov, DY; Chetverova, A et al. (2013):** Measured water discharges, suspended supply and morphometric parameters of cross-sections in the Lena River Delta during summer period 2002-2012  
Size: 9 datasets  
<https://doi.org/10.1594/PANGAEA.808854> - Score: 1.8
- Boike, J; Nitzbon, J; Anders, K et al. (2018):** Measurements in soil and air at Samoylov Station (2002-2018)  
*Supplement to:* **Boike, J; Nitzbon, J; Anders, K et al. (2019):** A 16-year record (2002–2017) of permafrost, active-layer, and meteorological conditions at the Samoylov Island Arctic permafrost research site, Lena River delta, northern Siberia: an opportunity to validate remote-sensing data and land surface, snow, and permafrost models. *Earth System Science Data*  
*Related to:* **Boike, J; Nitzbon, J; Anders, K et al. (2018):** Time lapse camera pictures at Samoylov, LTO, 2002-2017. *Alfred Wegener Institute - Research Unit Potsdam*  
**Boike, J; Nitzbon, J; Anders, K et al. (2018):** TLS measurements at Samoylov in 2017, link to pointclouds and DEM. *Alfred Wegener Institute - Research Unit Potsdam*  
Size: 5 datasets  
<https://doi.org/10.1594/PANGAEA.891142> - Score: 1.8
- Abnizova, A; Siemens, J; Langer, M et al. (2012):** Hydrochemistry, water level, and discharge of water from Samoylov Island, Lena Delta, northeastern Siberia, in 2008  
*Supplement to:* **Abnizova, A; Siemens, J; Langer, M et al. (2012):** Small ponds with major impact: The relevance of ponds and lakes in permafrost landscapes to carbon dioxide emissions. *Global Biogeochemical Cycles*  
Size: 7 datasets



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!

Map controls: GPS, Viewport, Clear, Apply, and coordinate input fields (N, S, E, W).

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

# New feature



Browser address bar: <https://www.pangaea.de>

AWI logo: Amelie Driemel

Navigation: SEARCH SUBMIT HELP ABOUT CONTACT

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ALL TOPICS

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

 <b>CHEMISTRY</b> (184209)	 <b>LITHOSPHERE</b> (133653)	 <b>BIOLOGICAL CLASSIFICATION</b> (33707)	 <b>ATMOSPHERE</b> (30296)	 <b>PALEONTOLOGY</b> (25754)
 <b>OCEANS</b> (21883)	 <b>ECOLOGY</b> (18564)	 <b>LAND SURFACE</b> (8089)	 <b>BIOSPHERE</b> (4340)	 <b>GEOPHYSICS</b> (3977)

### Latest News

2022-03-21  
**DFG SPECIFIES THE REQUIREMENTS FOR HANDLING RESEARCH DATA IN FUNDING APPLICATIONS**

**DFG** A subject-specific, adequate handling of research data on which scientific projects are based or which arise during their implementation is an essential part of quality-oriented and connectable research. The German Research Foundation (DFG) is now specifying the requirements for handling research data in applications for individual and collaborative projects and making information on this mandatory.

2022-03-09  
**DATA USAGE STATISTICS**

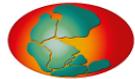
As of today, PANGAEA is providing a new service – publicly accessible usage statistics on all data publications. You can assess views of landing pages or data matrices, and download counts. The aggregations built with respect to user privacy are reaching back to 2012!

Show all 53 news items...

### Featured Data

**Weber, ME (2021):** Antiphased dust deposition and productivity in the Antarctic Zone over 1.5 million years  
<https://doi.org/10.1594/PANGAEA.939650>

# NEW: Data usage statistics



PANGAEA.

Data Publisher for Earth & Environmental Science

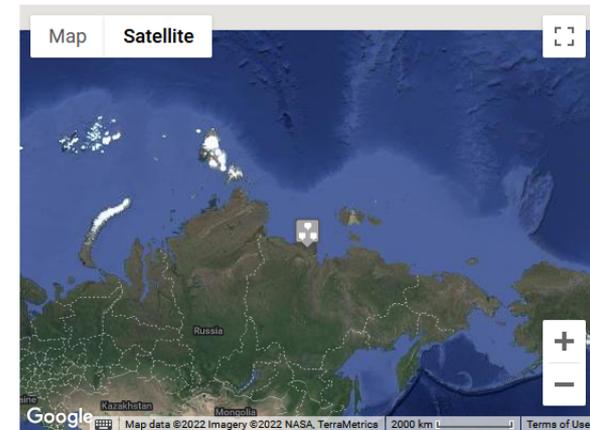
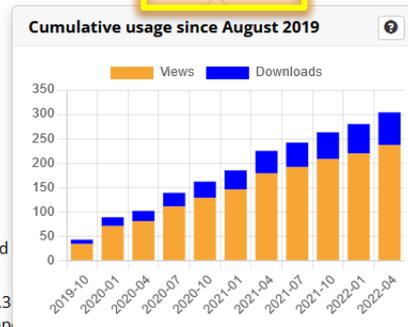
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## Citation:

**Boike, Julia; Nitzbon, Jan; Anders, Katharina; Grigoriev, Mikhail N; Bolshiyarov, Dimitry Yu; Langer, Moritz; Lange, Stephan; Bornemann, Niko; Morgenstern, Anne; Schreiber, Peter; Wille, Christian; Chadburn, Sarah; Gouttevin, Isabelle; Kutzbach, Lars (2019):** Measurements in soil and air at Samoylov Station (2002-2018), version 201908. Alfred Wegener Institute - Research Unit Potsdam, PANGAEA, <https://doi.org/10.1594/PANGAEA.905236>

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## Abstract:

This data set includes meteorological, soil, permafrost data obtained from Samoylov Station in the Lena River Delta, Siberia, between 1998 to 2018. The instrumentation, calibration, processing and data quality control is explained in Boike et al. (2018).

The mean annual air temperature 1998–2017 was calculated as  $-12.3$  °C (average of years 1999, 2000, 2004, 2005, 2007, 2008, 2011–2017). The average summer rainfall (June–October) was 145.2 mm (average of years 1999, 2003–2008, 2011–2017).

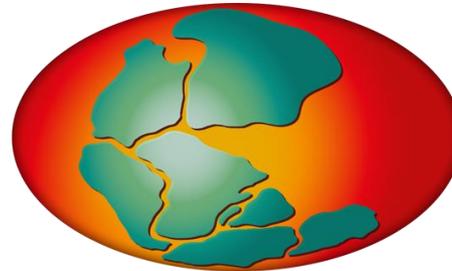
This is a new version of dataset:

Boike, Julia; Nitzbon, Jan; Anders, Katharina; Grigoriev, Mikhail N; Bolshiyarov, Dimitry Yu; Langer, Moritz; Lange, Stephan; Bornemann, Niko; Morgenstern, Anne; Schreiber, Peter; Wille, Christian; Chadburn, Sarah; Gouttevin, Isabelle; Kutzbach, Lars (2018): Measurements in soil and air at Samoylov Station (2002-2018). PANGAEA, <https://doi.org/10.1594/PANGAEA.891142>.

## Keyword(s):

dataset [Q](#); LTO [Q](#); Meteorologic [Q](#); Samoylov [Q](#); Soil [Q](#)

Thanks!



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Questions?

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