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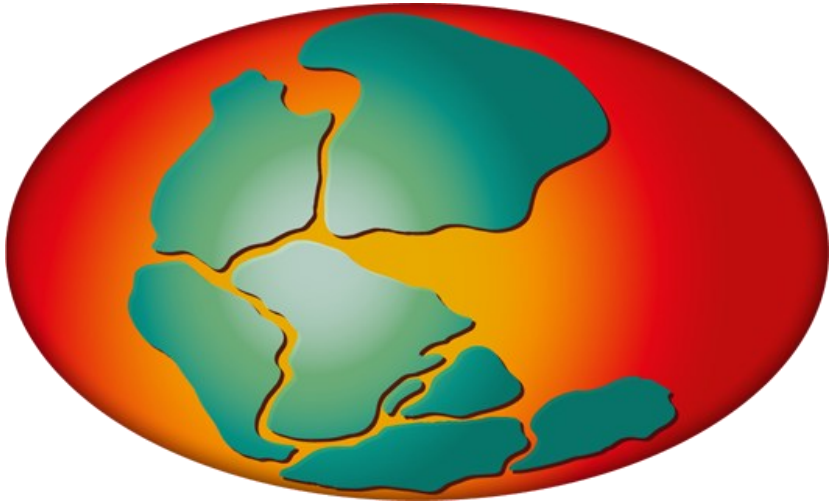

Amelie Driemel, PANGAEA Team

Bremerhaven, Coordination Workshop SPP 1158, 2025-09-30

marum Zentrum für Marine Umweltwissenschaften

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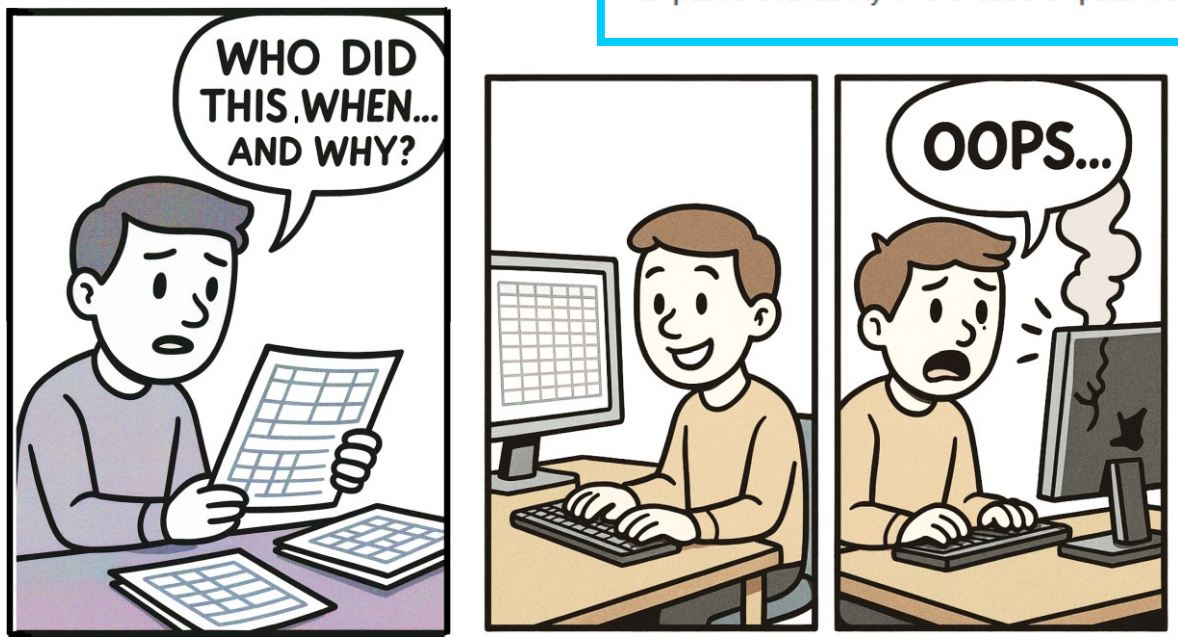
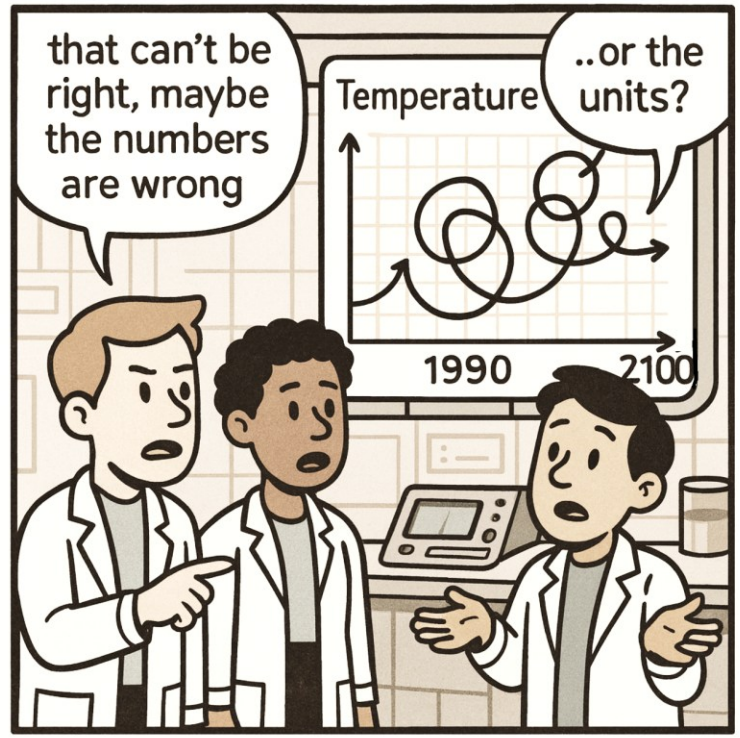
DFG rules

In the interest of transparency and to enable research to be referred to and reused by others, whenever possible researchers make the research data and principal materials on which a publication is based available in recognised archives and repositories in accordance with the FAIR principles (**F**indable, **A**ccessible, **I**nteroperable, **R**eusable). Restrictions may apply to public availability in the case of patent applications. If self-developed



Because shit can happen…

Because of the future…



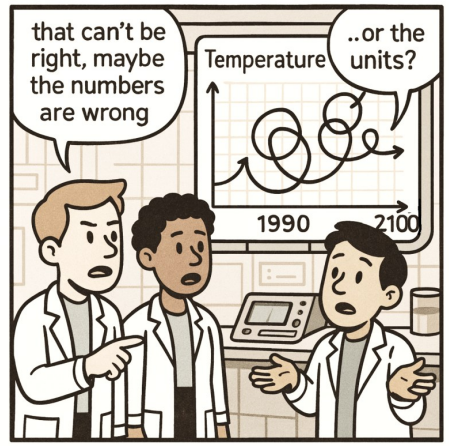
Why should I publish my data?

- unstable links,
- data not machine readable,
- metadata missing

TABLE 2.—COMPARATIVE X-RAY DATA FOR PHOSPHORITES. DATA AND MOST INDICES FOR FRANCOLITE ARE FROM MCCONNELL (1938). THIS SAMPLE IS A CARBONATE FLUORAPATITE (COLLOPHANE) FROM GRODNO, POLAND (NOW USSR), CONTAINING 51.0% CaO, 5.8% CO_2, 33.5% P_2O_5, 3.5% F, 0.5% MgO, AND 3.2% H_2O. THE FLORIDA SAMPLE IS A LAND PEBBLE FROM THE LAKELAND REGION OF CENTRAL FLORIDA, AND REPRESENTS REWORKED MIDDLE TERTIARY PHOSPHORITE. THE PUNGO RIVER SAMPLE IS FROM THE TEXAS GULF SULPHUR MINE, BEAUFORT COUNTY, NORTH CAROLINA AND CONSISTS OF A MASSIVE WHITISH AGGREGATE. UNIT CELL DIMENSIONS DETERMINED BY DANIEL APPLEMAN, SMITHSONIAN INSTITUTION.

Indices	Francolite (McConnell, 1938) d(Å)	I	Blake phosphorite[1] Sta. 2485 d	I	Phosphatized Manatee rib, Gerda Terrace Sta. 2348 d	I	Phosphorite[2] Bone Valley Formation, Fla. d	I	Phosphorite[3] Pungo River Formation, N.C. d	I
100	ND		8.08	4	8.15	b	8.08	4	8.07	5
101	ND		5.23	4	—	—	5.23	3	5.25	3
200	ND		4.03	4	—	—	4.05	6	4.03	4
111	ND		3.86	6	—	—	3.86	6	3.86	4
002	3.431	2	3.446	43	3.44	41	3.45	46	3.445	42
102	3.157	0.5	3.173	16	3.17	12	3.173	12	3.163	13
120	3.044	2	3.055	18	—	—	3.060	17	3.050	13
121	2.765	>10	2.791	100	2.78	100b	2.793	100	2.785	100
112	—	—	2.688	54	2.695	43b	2.698	58	2.691	51
202	2.618	4	2.622	28	2.622	20	2.625	29	2.621	26
301	2.508	0.5	—	—	—	—	2.514	4	2.502	4
122	2.277	1	2.280	24			2.285	8	2.285	9
130	2.238	3	2.237	21	2.245	18	2.245	24	2.238	20
131	2.127	2	2.127	7	2.125	5	2.137	5	2.123	6
113	2.057	1	2.055	5	—	—	2.062	5	2.057	6
203	1.996	1	1.993	4	1.995	8	2.000	4	1.993	4
222	1.928	3	1.930	21	1.931	17	1.934	25	1.929	20
132	1.876	1	1.877	15	1.88	8b	1.881	13	—	—
123	1.835	3	1.834	25	1.837	21b	1.837	35	1.834	28
231	1.788	2	1.786	10			1.793	13	1.785	10
140	1.762	2	1.760	11	1.764	13	1.766	14	1.760	13
402	1.740	2	1.738	10	—	—	1.744	11	1.740	10
004	1.720	2	1.721	13	1.720	12	1.723	13	1.721	13
232	1.631	0.5	1.630	4	—	—	1.634	6	1.633	9
133	1.601	0.5	1.605	3	—	—	1.604	3	1.602	2
240	1.525	0.5	1.		—	—	1.530	4	1.525	3
331	1.515	0.5	1.515	4	—	—	1.519	4	—	—
124	1.496	0.5	1.500	4	—	—	1.500	4	1.502	4
502	1.462	1	1.462	6	—	—	1.463	9	1.459	6
304	1.453	1	1.452	6	—	—	1.453	8	1.448	7
233	1.441	1	—	—	1.43	6b	—	—	1.438	6
151	1.419	1	1.418	6	—	—	1.422	5	1.416	4
Unit cell a(Å)	9.320		9.314		9.3416		9.345		9.317	

[1] Quartz main peak 3.339.
[2] Quartz main peak 3.345.
[3] Quartz main peak 3.335.
Given values are uncorrected for shifts in this internal standard line.



.... maybe it's not Temperature?

SORT	SPP	DATE	STAGE	TL	SEX	SVL	ZSVL	TAL	MAL	ECC	ECP	RBC	RBP
1	TAGR	7/15/13	M	33	U	18.38	0.106	14.32999992	0	0	0	1	1
2	TAGR	7/15/13	M	31	U	15.25	-0.452	16.10000038	0	0	0	3	1
3	TAGR	7/15/13	M	23	U	14.29	-0.623	9.079999924	0	0	0	2	1
4	TAGR	7/15/13	M	25	U	13.76	-0.717	11.57	0	0	0	0	0
5	TAGR	7/15/13	M	20	U	12.61	-0.922	7.77	0	0	0	18	1
6	LICA	8/5/13	M	63	M	62.9	1.806		0	14	1	0	0
7	LICA	8/8/13	M	61	F	60.98	1.591		0	472	1	1	1
8	LICA	8/8/13	M	60	F	60.14	1.497		0	0	0	0	0
9	LICA	8/5/13	M	59	M	59.39	1.413		0	76	1	0	0
10	LICA	8/8/13	M	58	F	58.27	1.288		0	146	1	99	1
11	LICA	7/1/13	M	58	M	57.71	1.226		0	0	0	0	0

187	2025-07-16T15:00:00
187	2025-07-16T15:50:00
187	2025-07-17T14:10:00
187	2025-07-15T09:05:00
187	2027-07-15T09:30:00
187	2027-07-15T10:30:00
187	2027-07-15T15:00:00
187	2027-07-15T15:10:00
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187	2027-07-15T15:20:00
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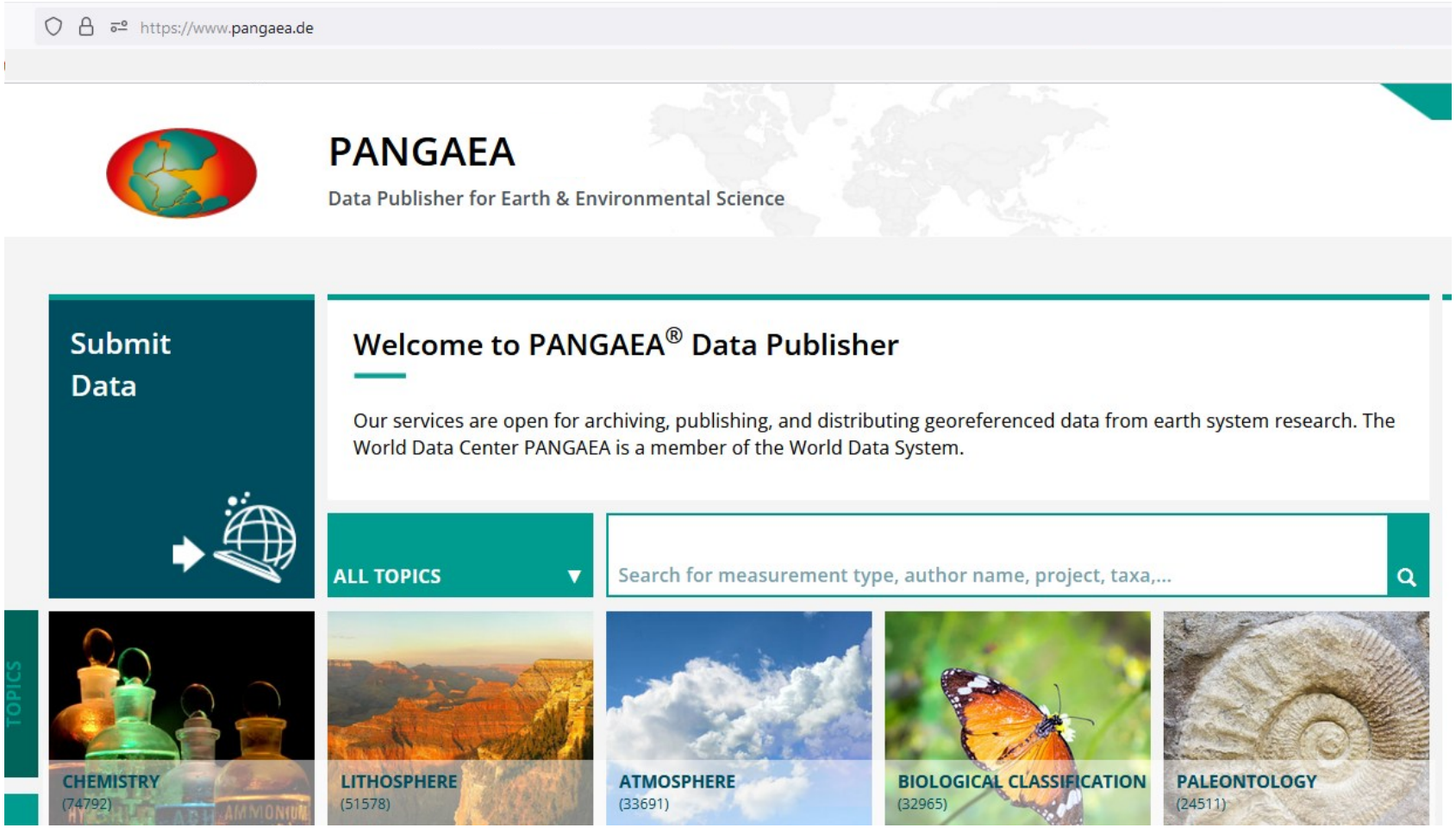
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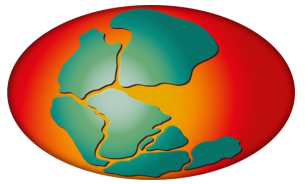
key aspects of PANGAEA (Perplexity.ai)



- **Open Access and Long-term Data Archiving**
- **FAIR Principles**: The platform ensures data integrity and usability for scientific work.
- **Persistent Citation with DOI**: Every published dataset is assigned a permanent DOI.
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PANGAEA in my words

- PANGAEA is a relational database and an open access Data Publisher
- It is the **designated database for SPP1158** (data + metadata!)
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- Your datasets are **curated** by real people (data curators)
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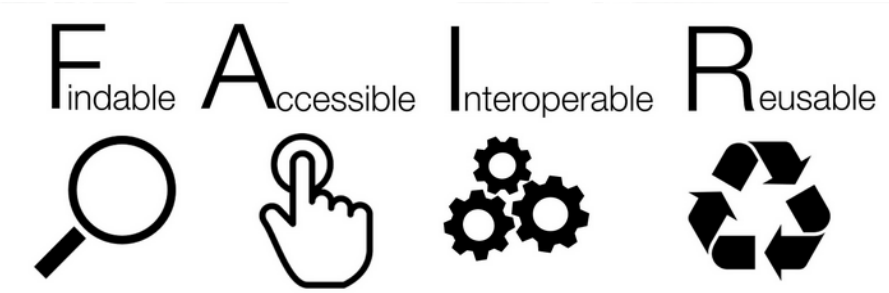

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Location

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Collector

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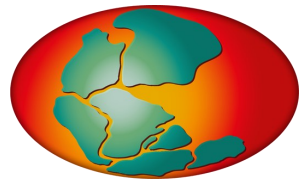
O2A



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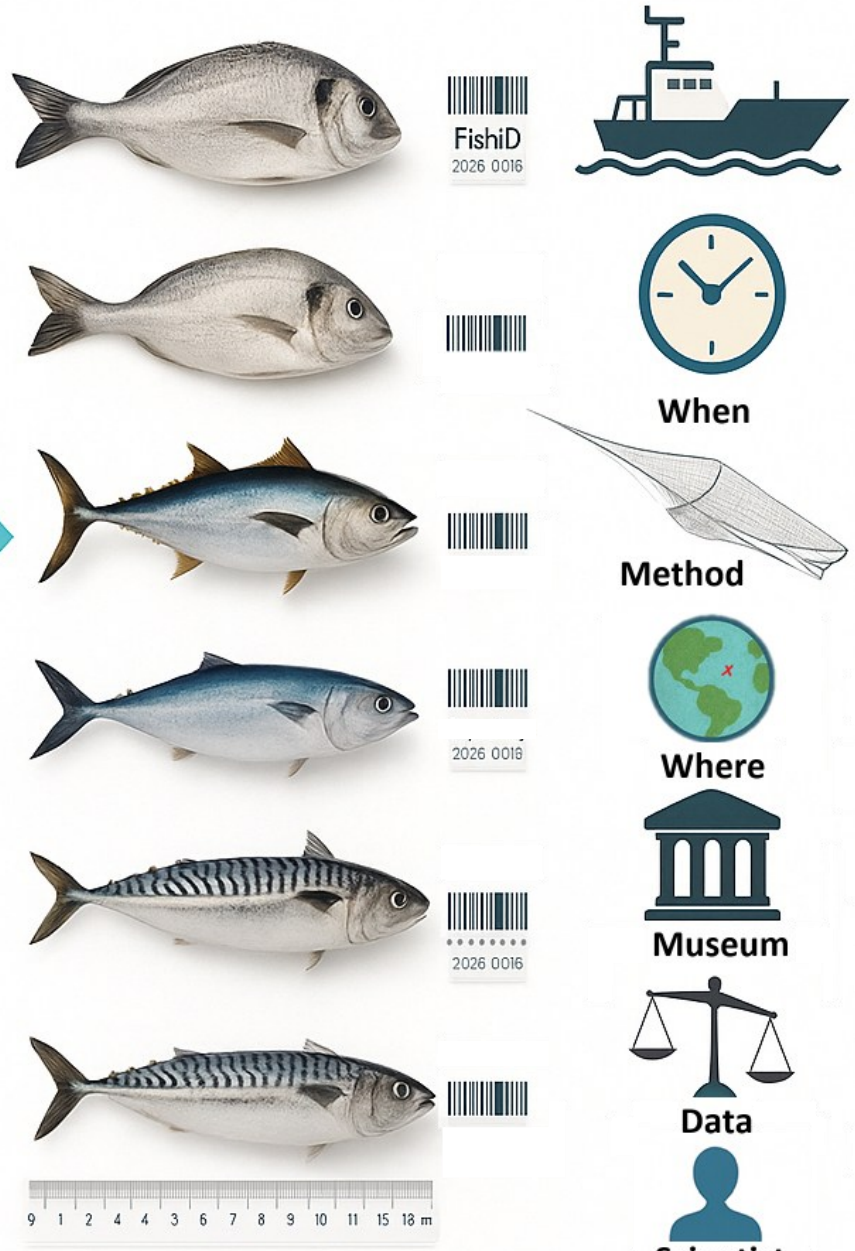
What? How? Where? When? Who? Stored? Data?

FAIR



When

Method

Where

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Data

Scientist

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ORCID
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WoRMS
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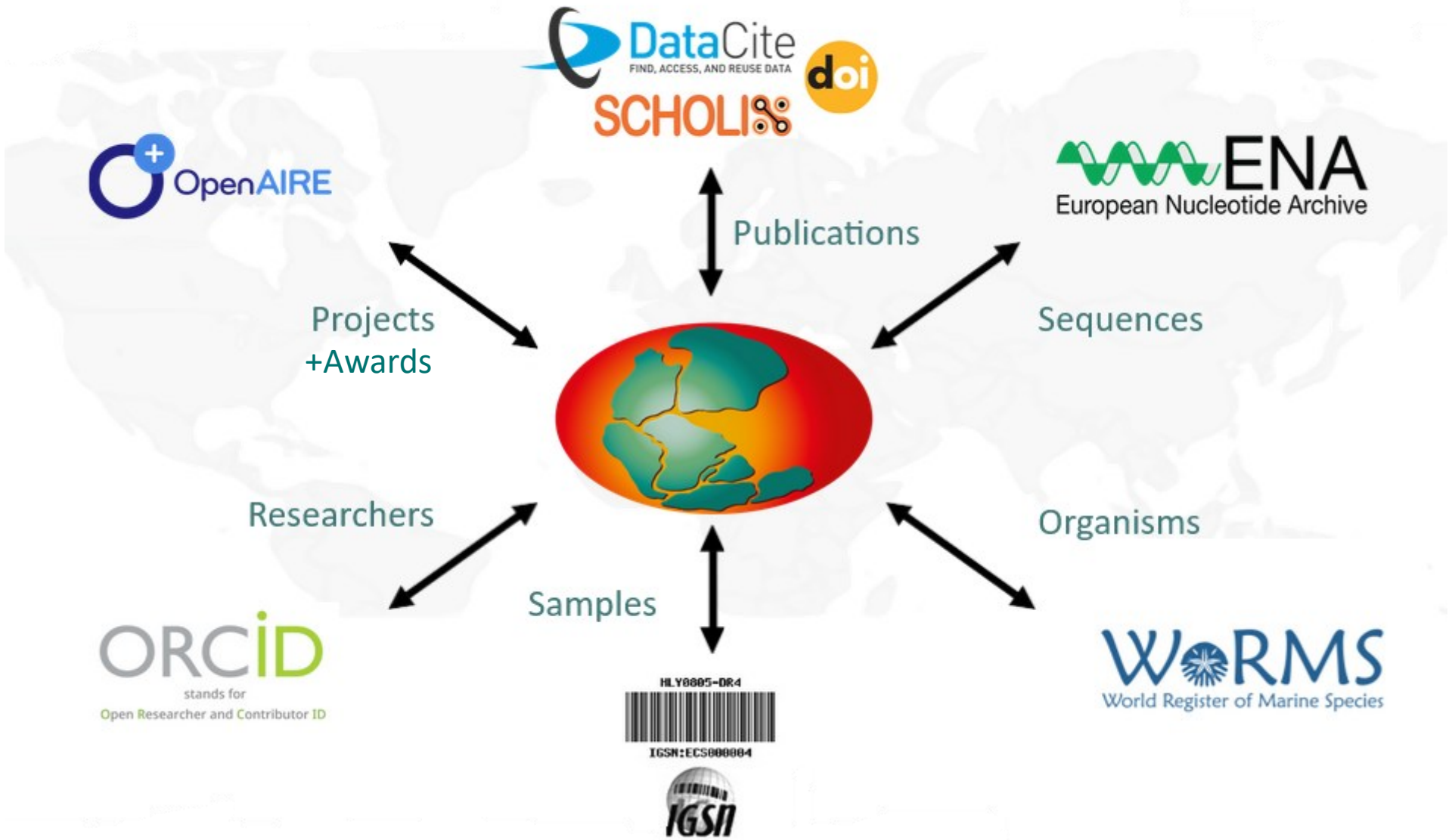
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IGSN
WoRMS
World Register of Marine Species

https://doi.org/10.1594/PANGAEA.968459

https://doi.pangaea.de/10.1594/PANGAEA.954738

Citation:

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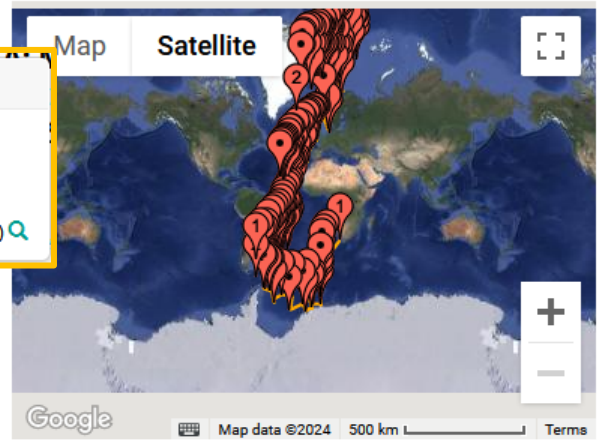
https://orcid.org/0000-0003-2827-0603

hongyan.xi@awi.de

Affiliation:

- Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven (AWI, https://ror.org/032e6b942)



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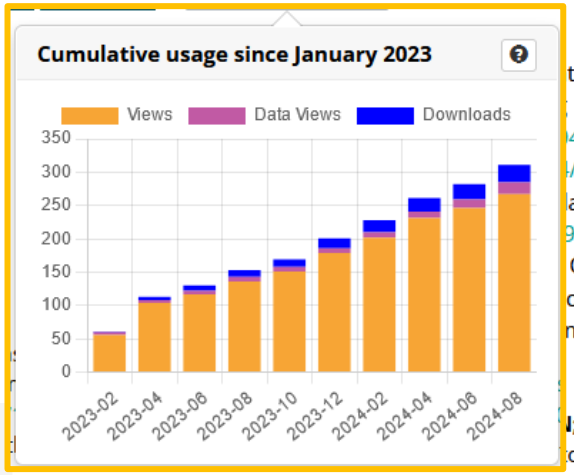
273 18 27



Abstract:

trolled in situ measurements of major pigments based on HPLC collected from various expeditions across the
11 expeditions with RV Polarstern from the North Atlantic to the Arctic Fram Strait: PS74, PSS76, PS78, PS80,
4872), PS99.1 (https://doi.org/10.1594/PANGAEA.905502), PS99.2 (https://doi.org/10.1594
/PANGAEA.899284), PS107 (https://doi.org/10.1594/PANGAEA.894860), PS121 (https://doi.org/10.1594
larstern and two Atlantic Meridional Transect expeditions with RRS James Clark Ross and RRS Discovery) in the
94/PANGAEA.911061), PS120, AMT28 and AMT29, and one expedition with RV Polarstern in the Southern Ocean:
Chlorophyll a concentration (Chl-a) of six phytoplankton functions groups (PFTs) derived from these pigments
contributed to validate satellite PFT products available on the EU funded Copernicus Marine Service (CMEMS,
m multi-sensor ocean colour reflectance data and sea surface temperature using an empirical orthogonal function

Supplement to:

; Brotas, Vanda; Gomes, Mara; Peeken, Ilka; Alvarado, Leonardo M A; Mangin, Antoine; Bracher, Astrid
on functional types in the Atlantic Ocean over 20 years (2002–2021). *in: 7th edition of the Copernicus Ocean State Report (OSR7), edited by: von Schuckmann, K., Moreira, L., Le Traon, P.-Y., Grégoire, M., Marcos, M., Staneva, J., Brasseur, P., Garric, G., Lionello, P., Karstensen, J., and Neukermans, G., State of the Planet*, **1-osr7(5)**, https://doi.org/10.5194/sp-1-osr7-5-2023

Source:

Bracher, Astrid (2019): Phytoplankton pigment concentrations during RV Sonne cruise SO243 [dataset]. *Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA*, https://doi.org/10.1594/PANGAEA.898920

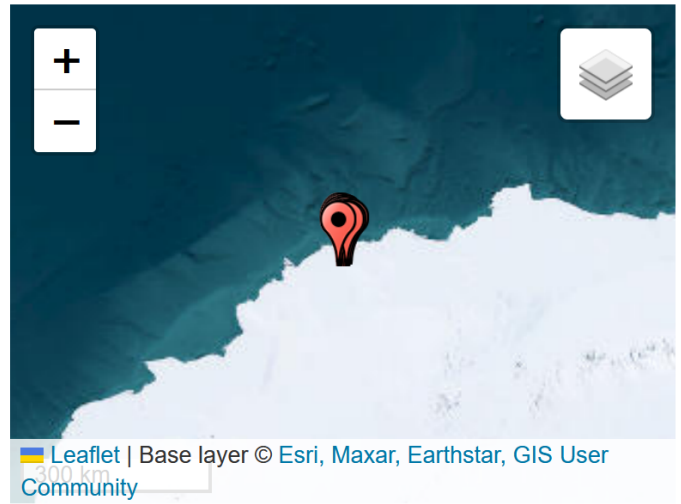
Bracher, Astrid (2019): Phytoplankton pigment concentrations in the Southern Ocean during RV POLARSTERN cruise PS103 in Dec 2016 to Jan 2017 [dataset]. *Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA*, https://doi.org/10.1594/PANGAEA.898941

References:

Alvarado, Leonardo M A; Soppa, Mariana A; Gege, Peter; Losa, Svetlana N; Dröscher, Iris; Xi, Hongyan; Bracher, Astrid (2022): Retrievals of the main phytoplankton groups at Lake Constance using OLCI, DESIS, and evaluated with field observations. *12th EARSeL Workshop on Imaging Spectroscopy in Potsdam, The Photogrammetric Record*, **37(177)**, 145-146, https://doi.org/10.1111/phor.7_12405

Citation:

Neudert, Mara; Arndt, Stefanie (2024): Thickness and properties of sea ice and snow of land-fast sea ice in Atka Bay in November and December 2022 [dataset]. *PANGAEA*, https://doi.org/10.1594/PANGAEA.968459



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13 2 2

Abstract:

Manual measurements of sea ice thickness, sub-ice platelet layer thickness, freeboard, and snow thickness are distributed evenly along four transect across Atka Bay in austral summer 2022. At each measurement location, 2 to 5 holes were drilled through the ice in order to determine the aforementioned parameters, one in the center and one in a distance of five meters scale spatial variabilities. The measurements have been mainly conducted by the 42nd overwinteri and Mara Neudert.

When you submit data, be sure to state it is a SPP1158 dataset

Keyword(s): AFIN; Atka Bay; DFG-SPP1158; Sea ice; Sub-ice platelet layer

Project(s):

Antarctic Fast Ice Network (AFIN)

Priority Programme 1158 Antarctic Research with Comparable Investigations in Arctic Sea Ice Areas (SPP1158)

Sea Ice Physics @ AWI (AWI_SeaIce)

Funding:

German Research Foundation (DFG), grant/award no. **5472008**: Priority Programme 1158 Antarctic Research with Comparable Investigations in Arctic Sea Ice Areas

Event(s):

ATKA00SNe-2022a * *Latitude:* -70.683331 * *Longitude:* -7.824991 * *Date/Time Start:* 2022-11-07T10:45:00 * *Date/Time End:* 2022-11-07T11:30:00 * *Location:* Antarctica * *Campaign:* ANT-Land_2022_AFIN (AFIN2022, AFIN2022plus) * *Basis:* NEUMAYER III * *Method/Device:* Multiple investigations (MULT)

ATKA00SNe-2022b * *Latitude:* -70.683331 * *Longit* 0:45:00 * *Date/Time End:* 2022-11-29T21:40:00 * *Location:* Antarctica * *Ca* 2022plus) * *Basis:* NEUMAYER III * *Method/Device:* Multiple investigations (MULT)

ATKA00SNe-2022c * *Latitude:* -70.683331 * *Longit* 2:00:00 * *Date/Time End:* 2022-12-06T12:40:00 * *Location:* Antarctica * *Ca* 2022plus) * *Basis:* NEUMAYER III * *Method/Device:* Multiple investigations (MULT)

Campaign: ANT-Land_2022_AFIN

Optional name: AFIN2022, AFIN2022plus
Event list: Link
Chief Scientist(s): Arndt, Stefanie
Cruise Report: https://doi.org/10.57738/BzPM_0784_2024
Start: 2022-06-01
End: 2023-01-04

Show more...

Parameter(s):

#	Name	Short Name	Unit	Principal Investigator	Method/Device	Comment
1	Event label	Event		Neudert, Mara		
2	Identification	ID		Neudert, Mara		
3	DATE/TIME	Date/Time		Neudert, Mara		Geocode – Start, UTC
4	DATE/TIME	Date/Time		Neudert, Mara		Geocode – End, UTC
5	LATITUDE	Latitude		Neudert, Mara		Geocode
6	LONGITUDE	Longitude		Neudert, Mara		Geocode
7	Air temperature at 2 m height	T2	°C			
8	Temperature, air	TTT	°C		Digital thermometer	Surface
9	Temperature, ice/snow	t	°C		Digital thermometer	Snow surface
10	Temperature, ice/snow	t	°C	Neudert, Mara	Digital thermometer	Snow-ice interface
11	Te				Digital thermometer	
12	Se				Ruler stick (RULER)	Center
13	Su				Ruler stick (RULER)	Center

Neudert, Mara

mneudert@awi.de

Temperature, ice/snow [°C]

Short name: t [°C]

Terms used:
Temperature (Θ, http://qudt.org/1.1/vocab/quantity#ThermodynamicTemperature)
ice (http://purl.obolibrary.org/obo/ENVO_01000277)
snow

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Status: *Curation Level:* Enhanced curation (CurationLevelC)

Size: 586 data points

Data

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

1 Event	3 Date/Time (Start, UTC)	5 Latitude	6 Longitude	7 T2 [°C]	8 TTT [°C] (Surface, Digital thermometer)	9 t [°C] (Snow surface, Digital thermom...)	10 t [°C] (Snow-ice interface, Digital t...)	11 Temp [°C] (Digital thermometer)	12 EsEs [m] (Center, Ruler stick)	13 SIPL [m] (Center, Ruler stick)	14 Snow thick [m] (Center, Ruler stick)	15 Freeboard [m] (Center, Ruler stick)	16 EsEs [m] (North, Ruler stick)
ATKA00SNw-2022	2022-11-05T10:50	-70.67499	-7.96172	-12.3	-11.5	-10.0	-7.1	-2.0	196.5	500.0	75	-2.0	189.5
ATKA02SNw-2022a	2022-11-05T12:15	-70.65662	-7.96169	-11.3	-11.5	-5.6		-2.6	179.5	447.5	314	-197.0	205.5
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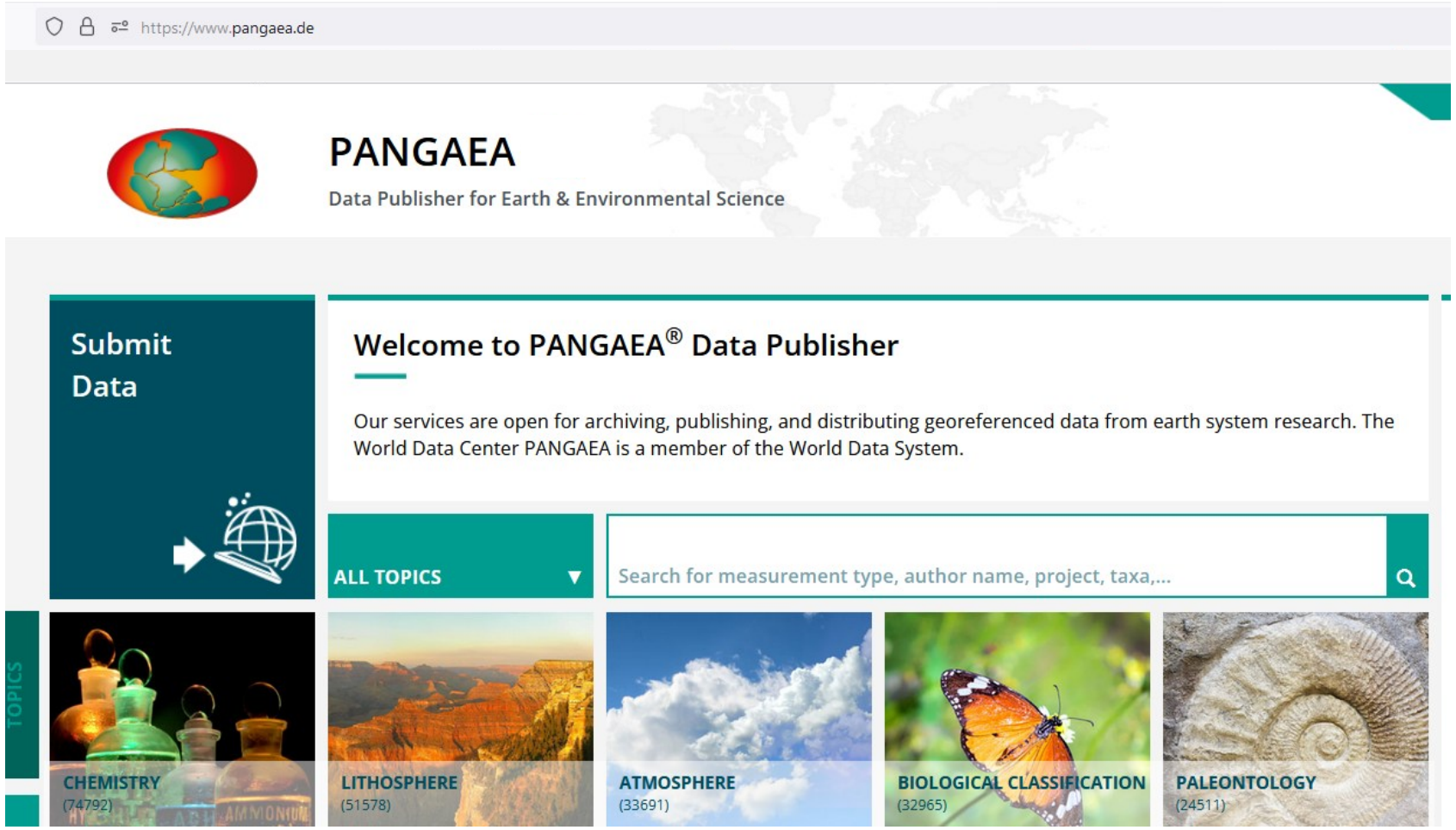
ATKA06SNw-2022	2022-11-05T16:00	-70.62083	-7.96166	-11.5	-11.6	-10.3	-9.5	-2.5	203.5	437.5	21	22.0	190.5
ATKA08SNw-2022	2022-11-05T16:55	-70.60335	-7.96160	-12.2	-13.2	-10.2	-10.0	-2.7	210.5	430.0	10	20.0	208.5

Data/metadata discovery

How do I submit?



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Look at https://wiki.pangaea.de

R and Python scripts to access data: https://www.pangaea.de/tools/

"The coolest thing to do with your data might be thought of by someone else" *[Rufus Pollock]*