

# PANGAEA

Publishing Network  
for Geoscientific & Environmental Data



# www.pangaea.de

## Open Access library for georeferenced data

from

### Basic research on earth & environment

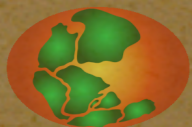
---

Normalized data model

Open parameter list

Internet clients for download

Web services for distribution





# Motivation

- ☑ **Open Access** to scientific results
- ☑ Safeguarding 'Good Scientific Practice'
- ☑ Added value through integration
- ☑ Reliable availability

**Budapest Open Access Initiative**  Deutsch  Français  На русском

[Home](#)

[Read the initiative](#)

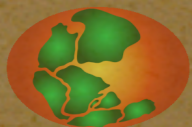
[Sign on to the initiative](#)

[View signatures](#)

**Budapest Open Access Initiative**

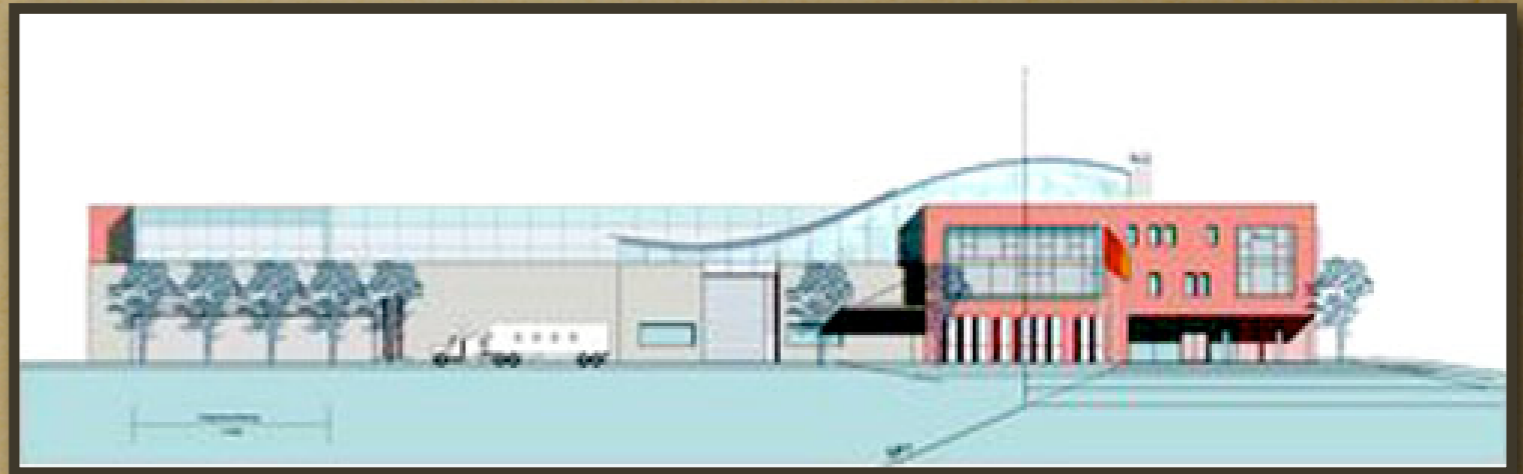
The Budapest Open Access Initiative arises from a small but lively meeting convened in Budapest by the Open Society Institute (OSI) on December 1-2, 2001. The purpose of the meeting was to accelerate progress in the international effort to make research articles in all academic fields freely available on the

**September 29, 2004**  
Grants for Open Access Journals  
[Learn More](#)





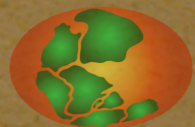
# Operating Institutions



Center for Marine Environmental Sciences, Bremen

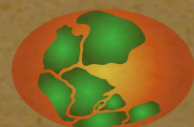


Alfred Wegener Institute for Polar and Marine Research  
Bremerhaven



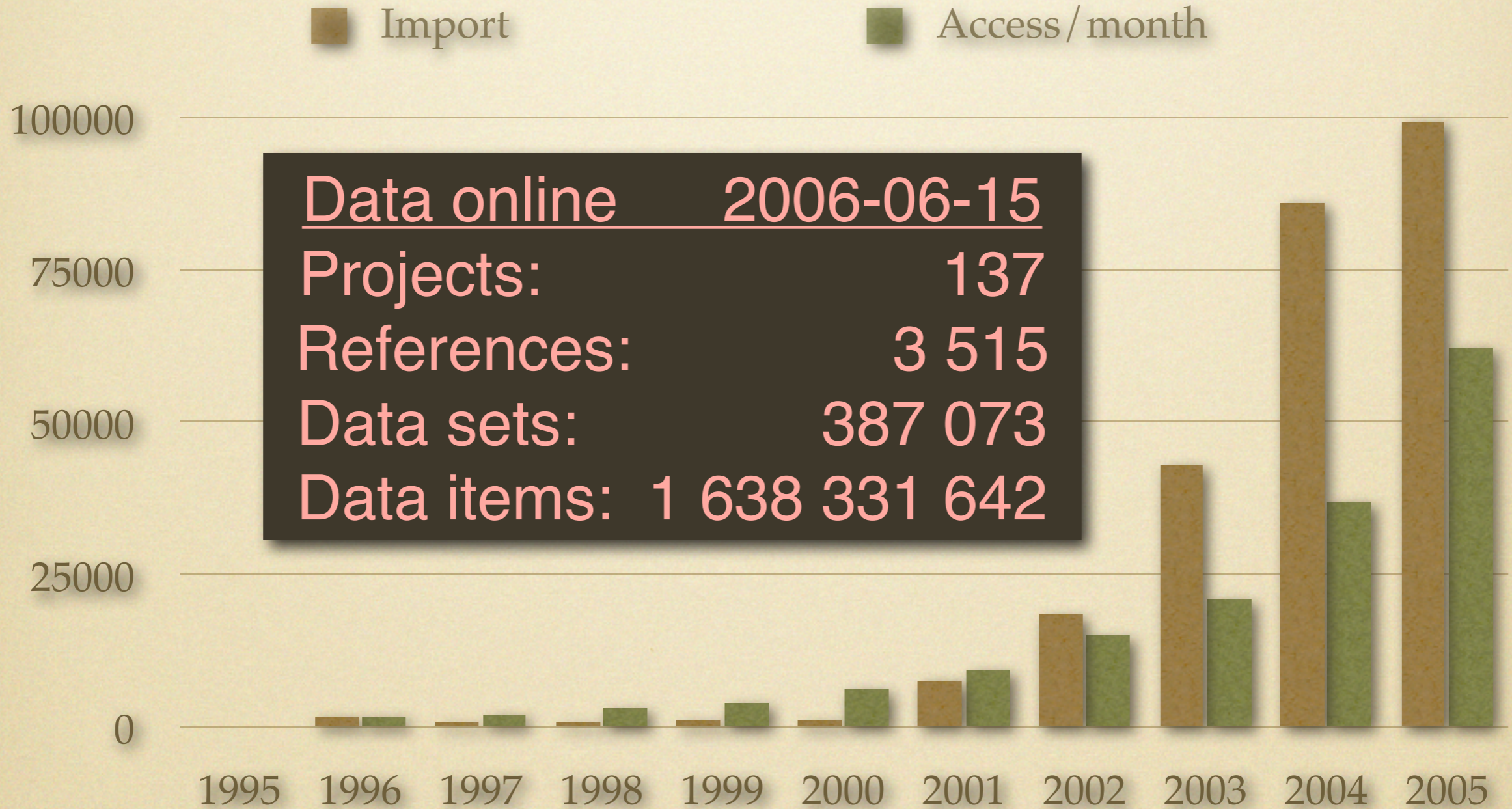


# World Data Center for Marine Environmental Sciences





# Data Content





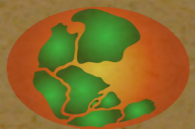
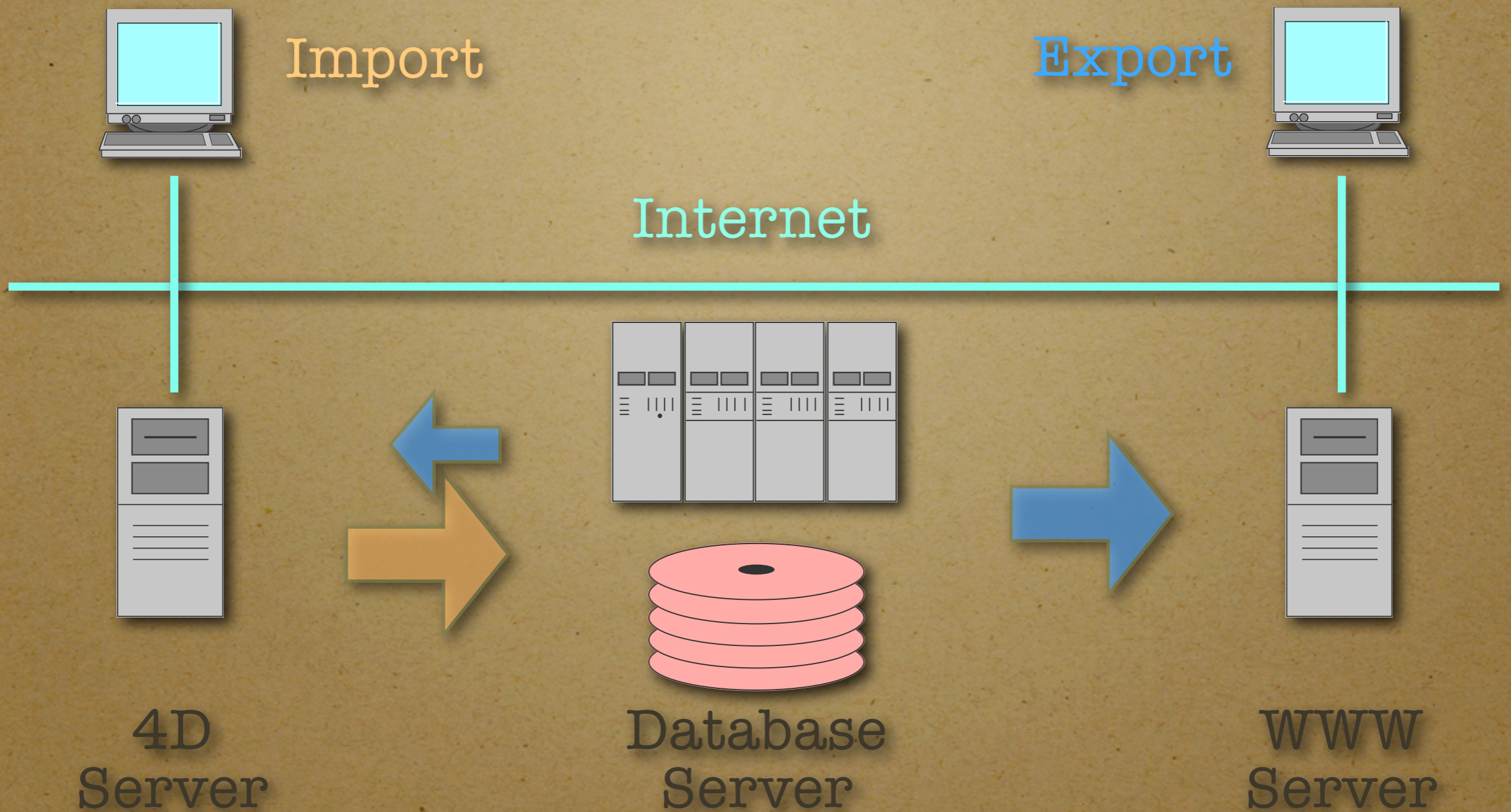
# Major Projects

<u>International</u>	<u>EU</u>	<u>National</u>
IMAGES	OMARC	rcom
JGOFS	CarboOcean	SIRRO
WOCE	EurOceans	WATT
EPICA	HERMES	DEKLIM
IODP	CENSOR	DFG/BMBF





# Client/server network





# Geo-reference & meta-data

following ISO19115

*when ?*



*what ?*



*how ?*



123.456

text

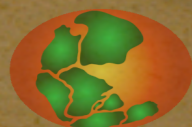


*where ?*



ice, water, air,  
sediment, object...

*who ?*





# Digital Object Identifier



SCIENCE @ DIRECT

[Home](#) [Search](#) [Journals](#) [Abstract Databases](#) [Reference Works](#) [My Alerts](#) [My Profile](#)

Quick Search:  within   [? Search tips](#)

[results list](#) [← previous](#)

## Computers & Geosciences

Volume 28, Issue 10, December 2002, Pages 1201-1210

DOI: [10.1016/S0098-3004\(02\)00039-0](https://doi.org/10.1016/S0098-3004(02)00039-0)

Copyright © 2002 Elsevier Science Ltd. All rights reserved.

## PANGAEA—an information system for environmental sciences

Michael Diepenbroek<sup>a</sup>, Hannes Grobe<sup>b</sup>, Manfred Reinke<sup>b</sup>, Uwe Schindler<sup>c</sup>, Reiner Schlitzer<sup>b</sup>, Rainer Sieger<sup>b</sup> and Gerold Wefer<sup>a</sup>

<sup>a</sup> Center for Marine Environmental Sciences (MARUM), University Bremen, Bremen 28334, Germany

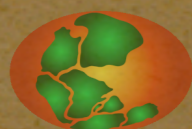
<sup>b</sup> Alfred Wegener Institute for Polar and Marine Research, Bremerhaven 27515, Germany

<sup>c</sup> Physics Department, University of Erlangen-Nuremberg, Erlangen 91058, Germany

Received 23 March 2001; revised 20 April 2001; accepted 5 May 2001. Available online 20 September 2002.

### Abstract

PANGAEA is an information system for processing, long-term storage, and publication of georeferenced data related to earth science fields.






International  
 Foundation



Registration Agency  
for scientific primary data



Data library  
PANGAEA



Data center B  
WDC



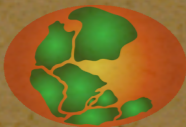
Data center C  
GFZ



Data center  
xyz...



**10.1594/PANGAEA.119754**





# Data Access

- 🌐 **PangaVista** > search engine
- 🌐 **ART** (Advanced Retrieval Tool) > data mining
- 🌐 **PIM** (Pangaea Internet Mapper) > map view
- 🌐 **DOI** (Digital Object Identifier) > persistent link
- 🌐 **Web service** > exchange with portals (ISO, DC, XML)





# Air photos (restricted access)

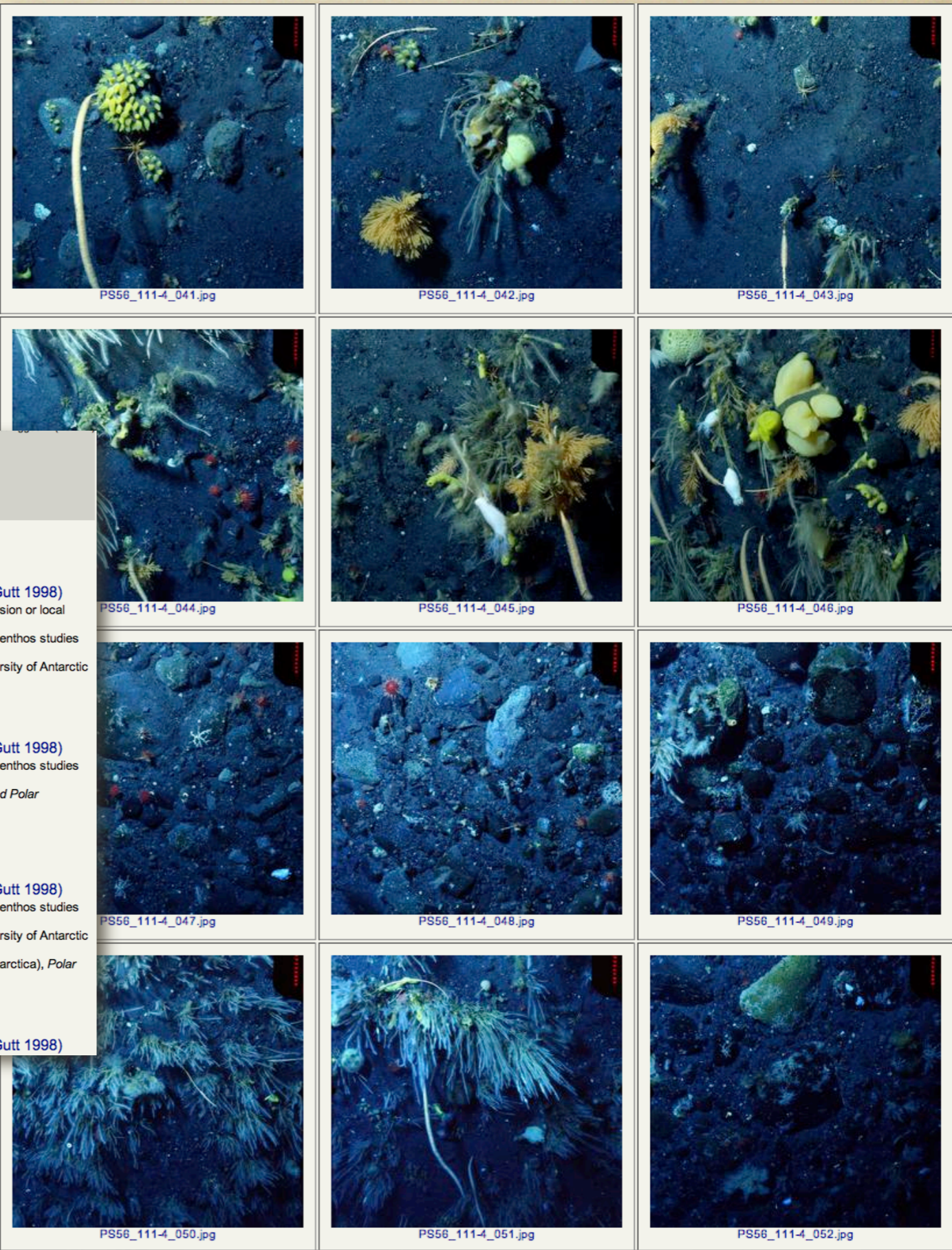


[doi:10.1594/PANGAEA.323540](https://doi.org/10.1594/PANGAEA.323540)





# Sea-bed photos



Search for:  
 Search    
[Show map](#)

189 datasets found!

<< PREV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | NEXT >>

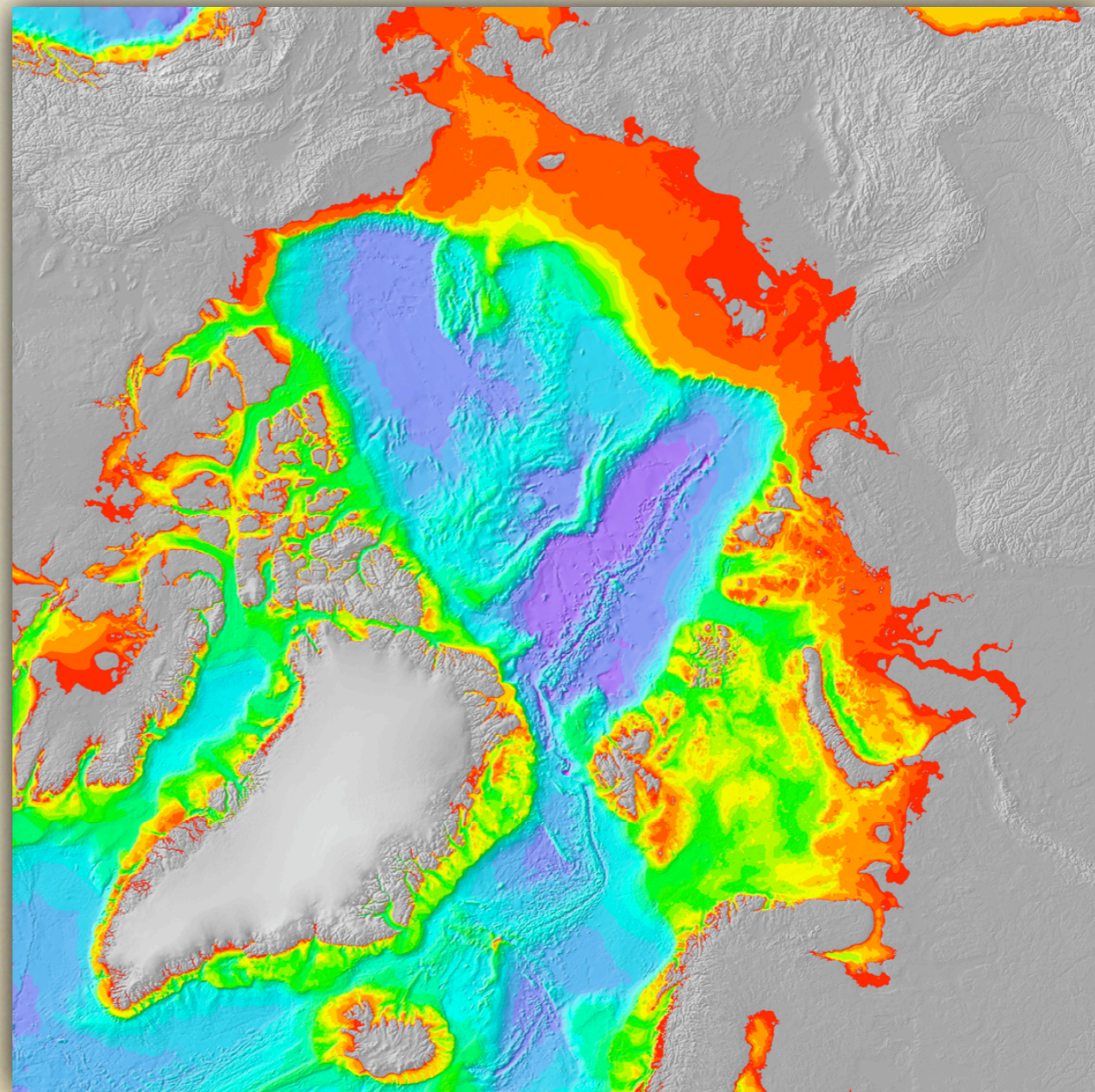
- Gutt, J (2004):** Sea-bed photographs (benthos) from the Weddell Sea along ROV profile PS48/281 (©AWI, Gutt 1998)  
*Reference:* Raguá-Gil, JM; Gutt, J; Clarke, A et al. (2004): Antarctic shallow-water mega-epibenthos: shaped by circumpolar dispersion or local conditions?, *Marine Biology*  
 Gutt, J; Arntz, WE; Balguerías, E et al. (2003): Diverse approaches to questions of diversity: German contributions to benthos studies around South American and Antarctica, *Gayana*  
 Gutt, J; Piepenburg, D (2003): Scale-dependent impacts of catastrophic disturbances by grounding icebergs on the diversity of Antarctic benthos, *Marine Ecology Progress Series* (and more)  
 Size: unknown  
 doi:10.1594/PANGAEA.198686 - Score: 80% - Similar datasets
- Gutt, J (2004):** Sea-bed photographs (benthos) from the Weddell Sea along ROV profile PS48/238 (©AWI, Gutt 1998)  
*Reference:* Gutt, J; Arntz, WE; Balguerías, E et al. (2003): Diverse approaches to questions of diversity: German contributions to benthos studies around South American and Antarctica, *Gayana*  
 Gutt, J (2001): High latitude antarctic benthos: a coevolution of nature conservation and ecosystem research?, *Ocean and Polar Research*  
 Gutt, J (2001): On the direct impact of ice on marine benthic communities, a review, *Polar Biology* (and more)  
 Size: unknown  
 doi:10.1594/PANGAEA.198685 - Score: 80% - Similar datasets
- Gutt, J (2004):** Sea-bed photographs (benthos) from the Weddell Sea along ROV profile PS48/219 (©AWI, Gutt 1998)  
*Reference:* Gutt, J; Arntz, WE; Balguerías, E et al. (2003): Diverse approaches to questions of diversity: German contributions to benthos studies around South American and Antarctica, *Gayana*  
 Gutt, J; Piepenburg, D (2003): Scale-dependent impacts of catastrophic disturbances by grounding icebergs on the diversity of Antarctic benthos, *Marine Ecology Progress Series*  
 Gutt, J; Starmans, A (2001): Quantification of iceberg impact and benthic recolonisation patterns in the Weddell Sea (Antarctica), *Polar Biology* (and more)  
 Size: unknown  
 doi:10.1594/PANGAEA.198684 - Score: 80% - Similar datasets
- Gutt, J (2004):** Sea-bed photographs (benthos) from the Weddell Sea along ROV profile PS48/213 (©AWI, Gutt 1998)

doi:10.1594/PANGAEA.319918





IBCAO  
in  
PanMap format

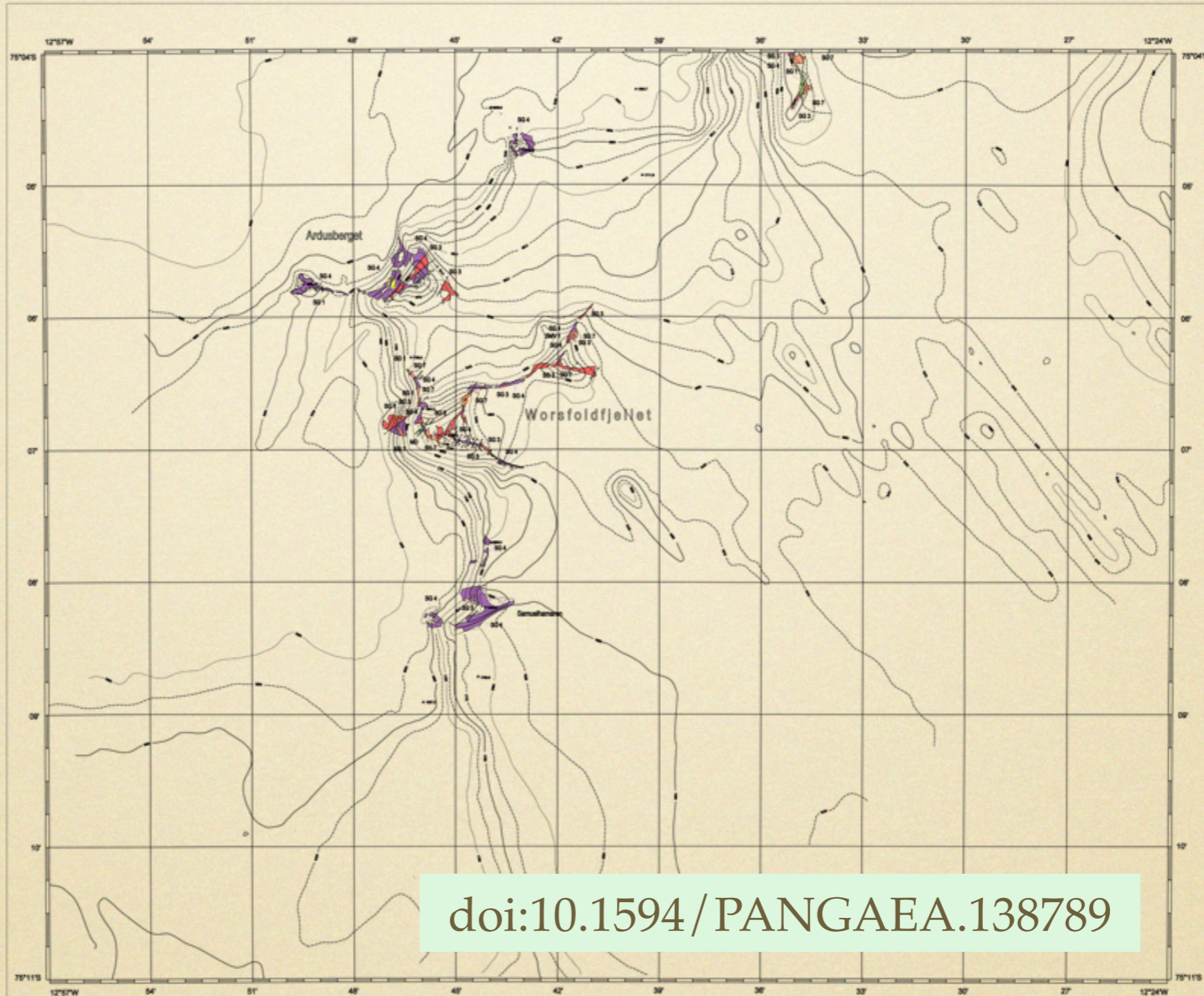
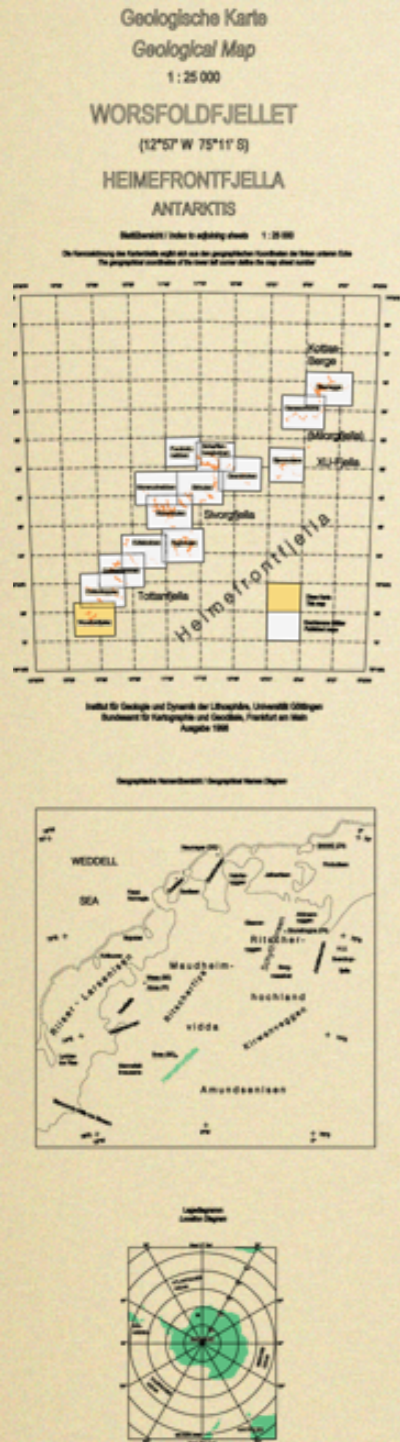


[doi:10.1594/PANGAEA.57822](https://doi.org/10.1594/PANGAEA.57822)





# Worsfoldfjellet



doi:10.1594/PANGAEA.138789

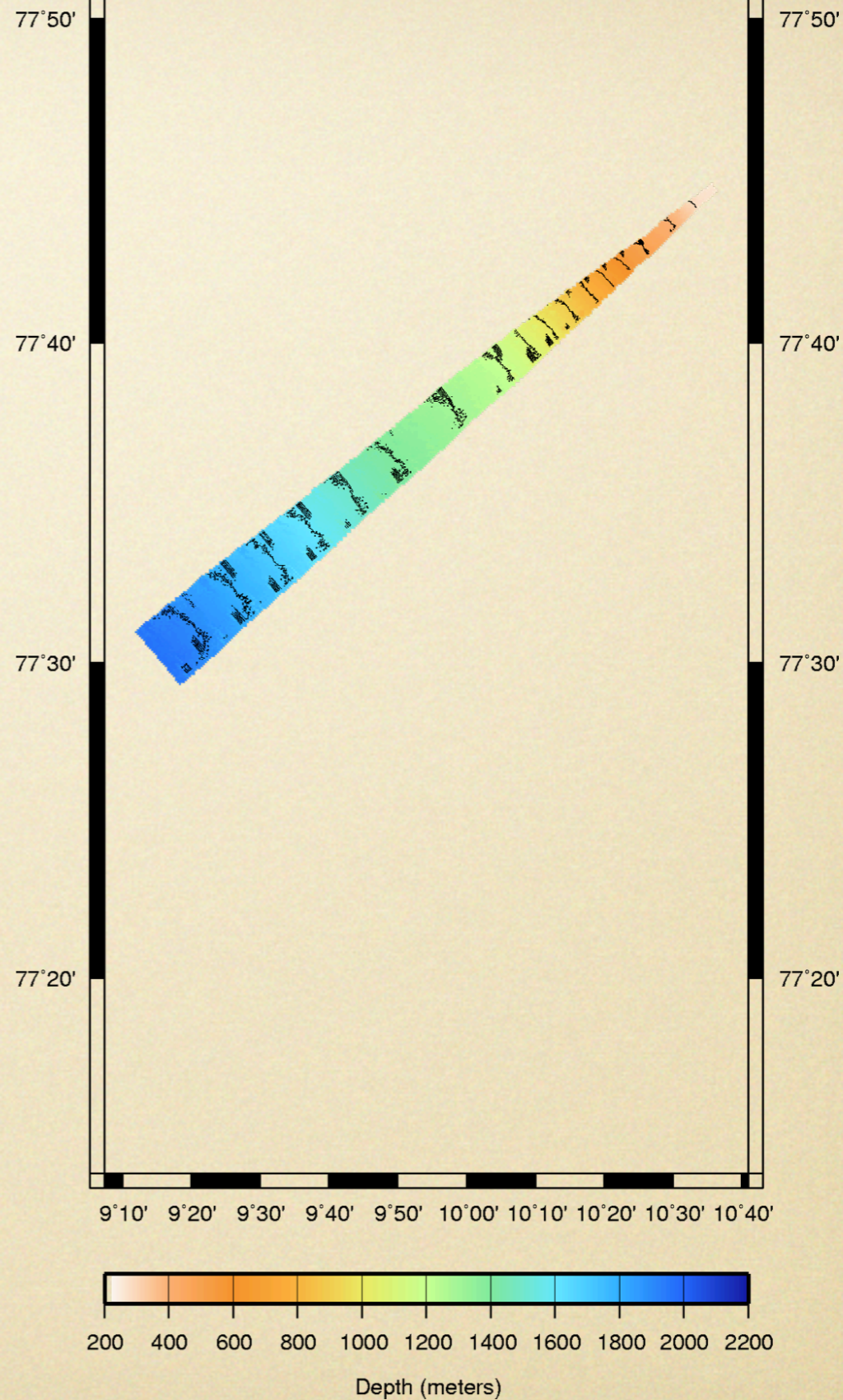
DOI

TIBOrder

Google



# Swath sonar bathymetry

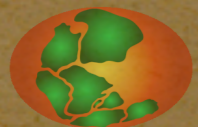
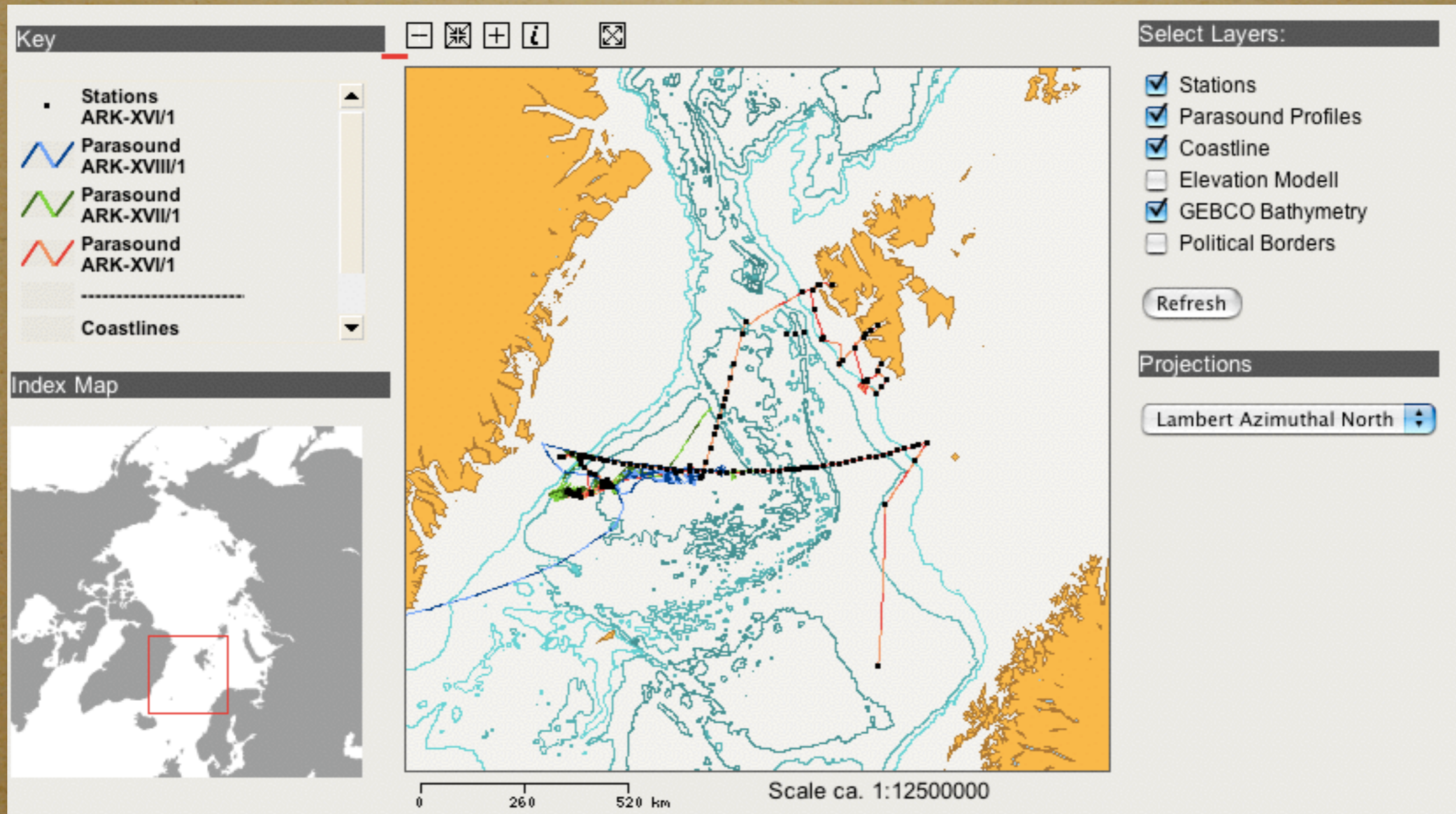


[doi:10.1594/PANGAEA.351142](https://doi.org/10.1594/PANGAEA.351142)





# Pangaea Internet Mapper





## Contact

info@pangaea.de

*This presentation is available at [doi:10.1594/pangaea.351396](https://doi.org/10.1594/pangaea.351396)*