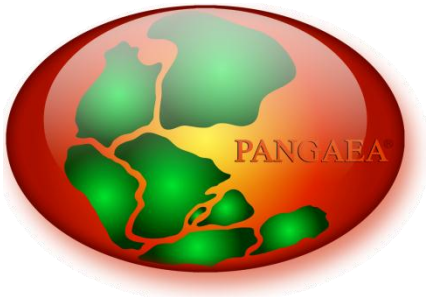
SeaDataNet 2 – New Participants

University Bremen (UniHB)



PANGAEA

Stéphane PESANT
(spesant@marum.de)

Universität Bremen marum

OUTLINE

1. HISTORY
2. PEOPLE
3. INFRASTRUCTURE
4. DATA COLLECTIONS
5. METADATA & DATA SUBMISSION
6. METADATA & DATA CURATION
7. METADATA & DATA DISSEMINATION
8. CONTRIBUTION TO SEADATANET 2

HISTORY

1993

PANGAEA Data Publisher for Earth & Environmental Science

UniHB, Bremen
Germany

2001

Mandate of the International Council for Science:
World Data Center for Marine Environmental Sciences (WDC-MARE)

2007

Mandate of the World Meteorological Organisation (WMO):
World Radiation Monitoring Center (WRMC)

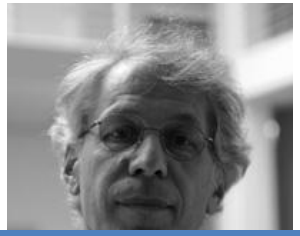
2010

Mandate of the World Meteorological Organisation (WMO):
Data Collection and Processing Center (DCPC)

PEOPLE

CORE IT GROUP

M. Diepenl
Leader, IT s



Schindler
specialist

+ 20 Curators distributed in various research institutes

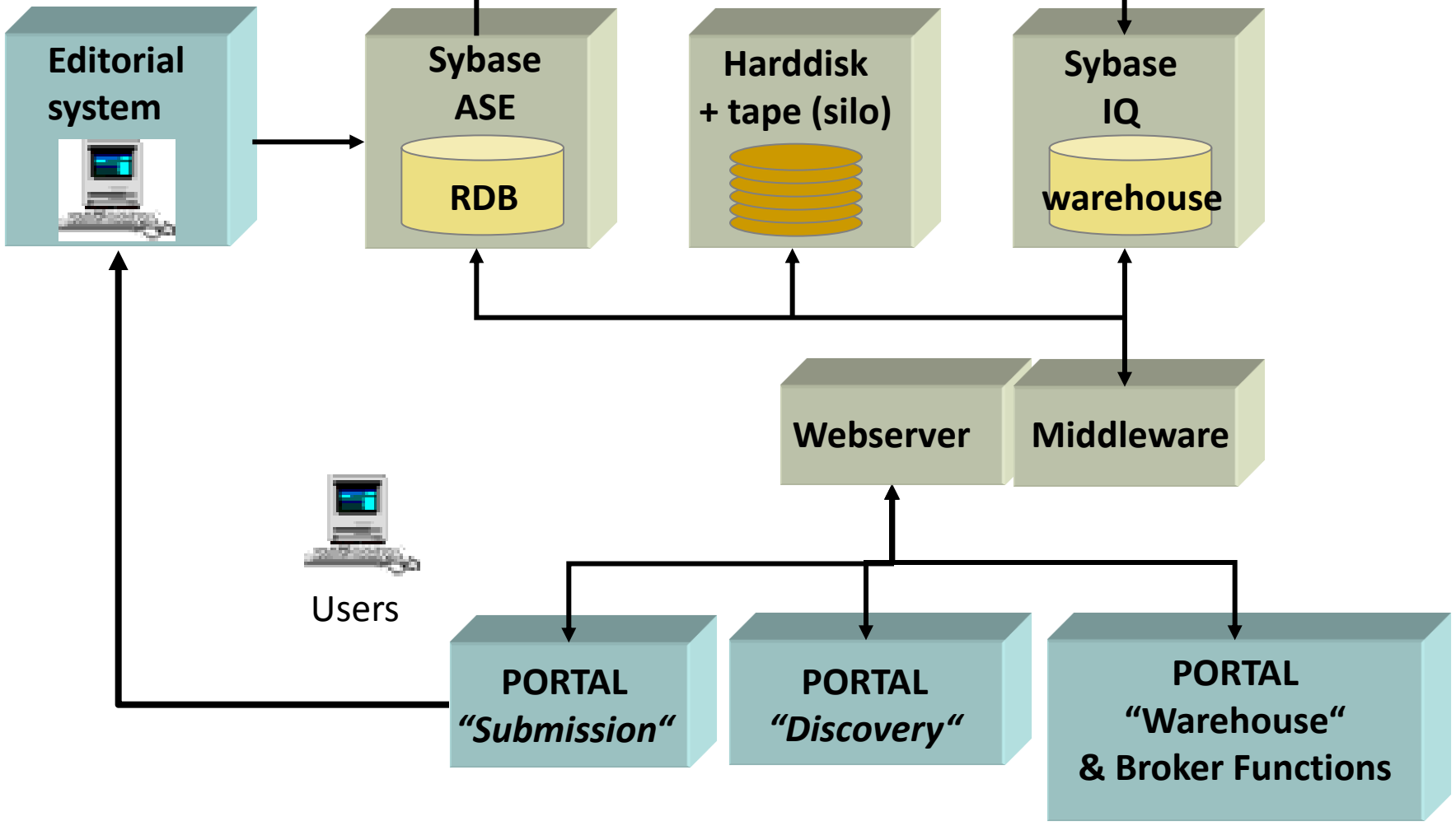
BIOLOGY GROUP

S. Pesant
Ecology, pelagic

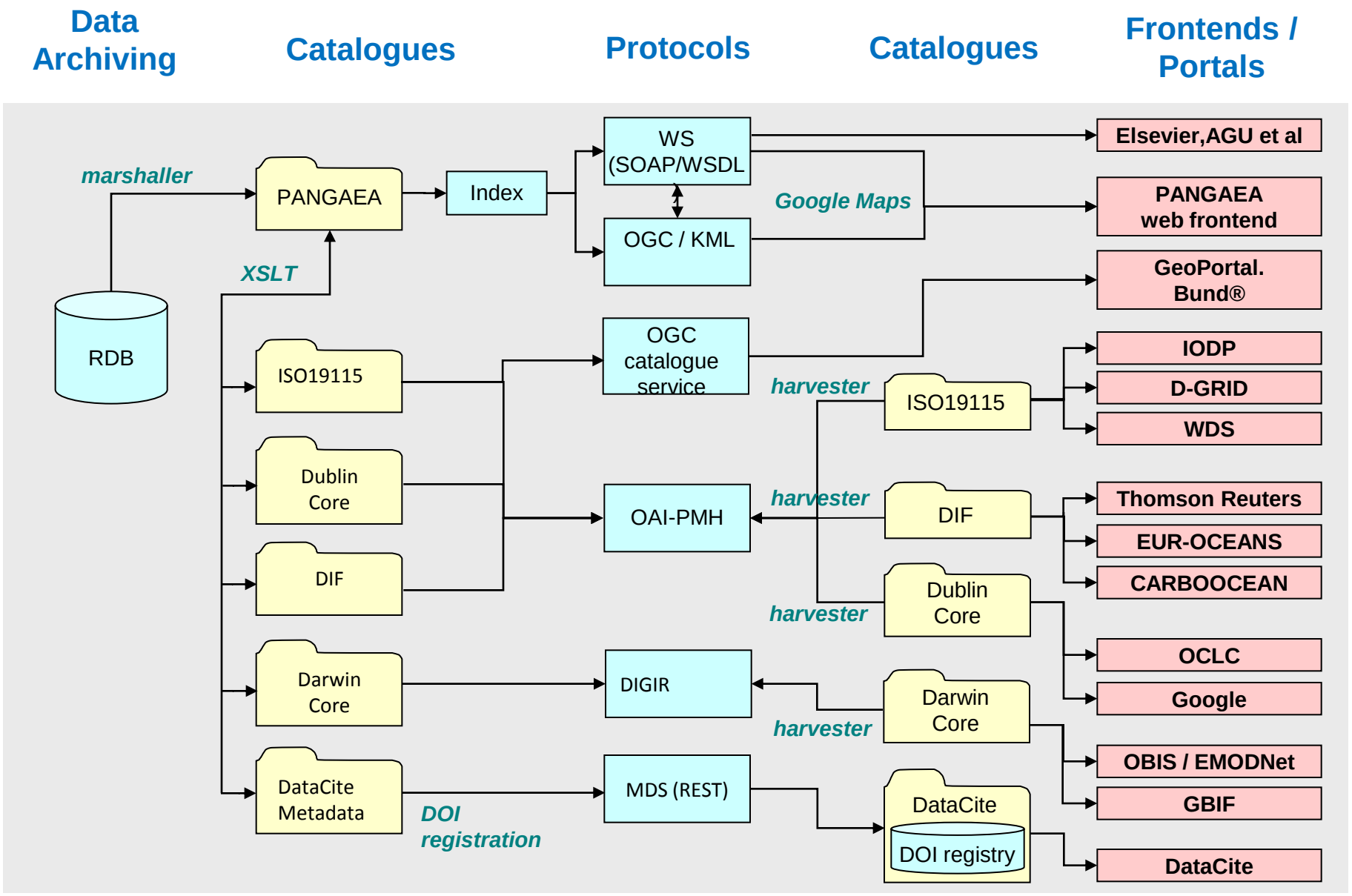
J. Felden
Ecology, benthic

C. Berhens
Paleooceanography

INFRASTRUCTURE

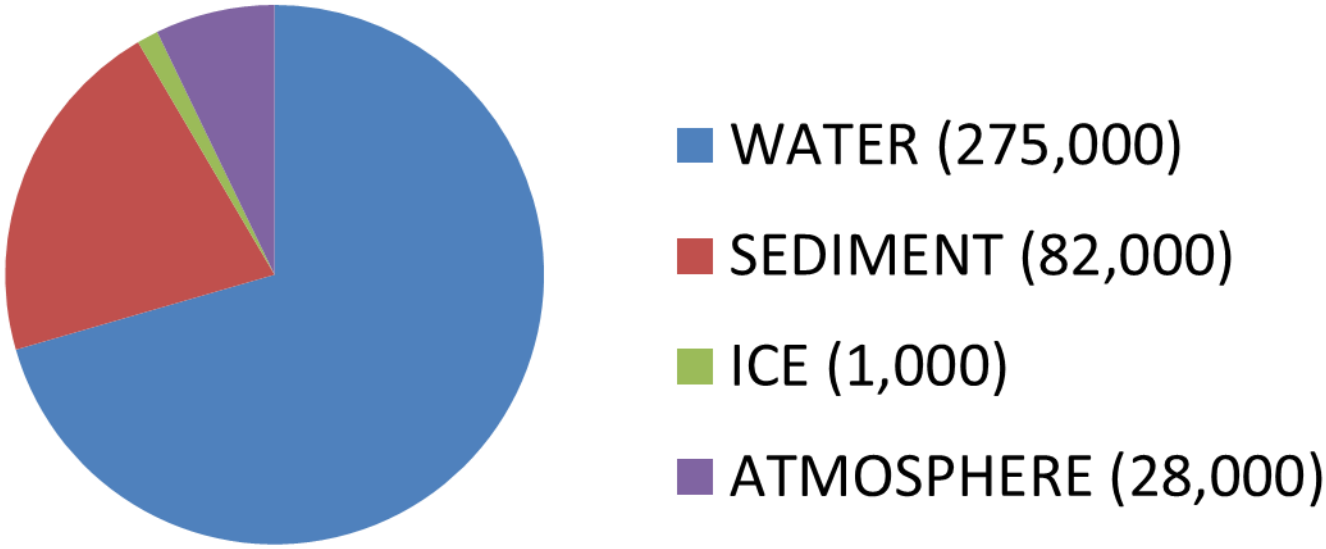


INFRASTRUCTURE



DATA COLLECTIONS

Number of Datasets



Number of Data Items: >6 billion

Environmental data (e.g. physics, chemistry, optics)
Biological inventories (e.g. presence/absence, abundance, biomass)
Biological vital rates (e.g. production, grazing, excretion, respiration)
Biogeochemical fluxes (e.g. air-sea fluxes, sedimentation, dissolution)
Acoustics, images, video and audio

DATA COLLECTIONS

Closely coupled with important scientific topics

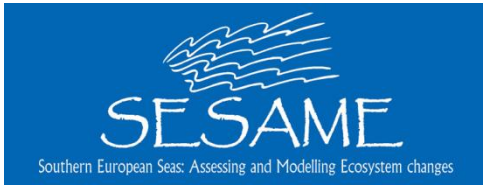
Global Carbon Cycling

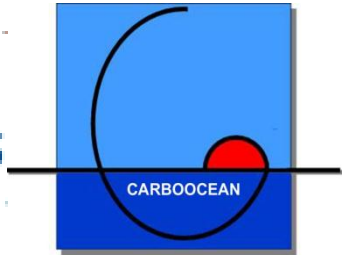
Ocean Acidification

Hypoxia

Paleoclimatology

Biodiversity





METADATA & DATA SUBMISSION

Online ticket system (JIRA Client)

PANGAEA®
Data Publisher for Earth & Environmental Science

Stephane Pesant | Quick Search

Dashboards | Projects | Issues | + Create Issue

Create Issue

Project **PANGAEA Data Archiving & Publication**

Issue Type **Data Submission**

Data description | Related article

Summary * Data submission 2011-09-24T13:50:10Z (Stephane Pesant, MARUM - Center for Marine Environmental Sciences, University of Bremen)
The summary (subject) is used as identifier in the further communication.

Author(s) of data set(s) * Pesant, Stephane
Please, enter the author(s) (the principal investigators) for the data set(s) you want to submit.
One author per line; example: *Smith, Joe Peter*

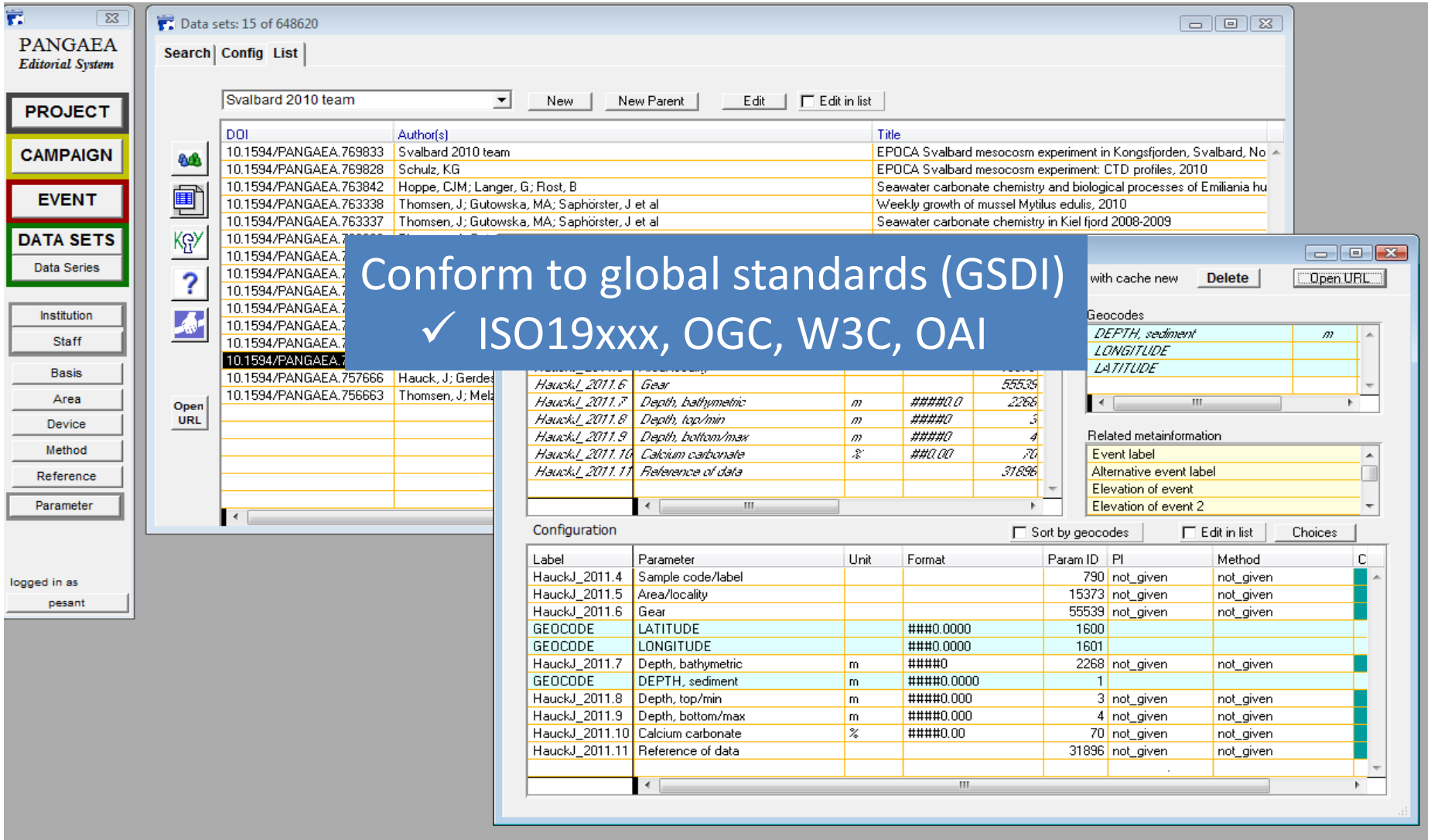
Title of data set(s)
The title should ideally reflect what has been measured, observed, or calculated, when, where, and how.

Abstract
Short description of the data

Attachment Parcourir...
Attachment
The maximum file upload size is 100.00 MB.

METADATA & DATA CURATION

Online curation system (4D Client)



METADATA & DATA CURATION

Pesant my talk my preferences my watchlist my contributions log out

page | discussion | view source | history | delete | watch | purge cache

navigation
- PangaWiki Home
- Technical Docs

specials
- Recent changes
- Random page

search
Go Search

toolbox
- What links here
- Related changes
- Upload file
- Special pages
- Printable version
- Permanent link

Main Page

Welcome to **PangaWiki**! This wiki is a dynamic manual and reference for the data library

PANGAEA® - Data Publisher for Earth & Environmental Science

PangaWiki is operated to support data providers, curators and end-users in archiving, publishing and retrieving data from earth system research in the data library Pangaea. It is the reference system for any questions and information around the system and its operation. The Pangaea login is required to add or modify pages.

An outline of important PangaWiki chapters is listed in the **table of contents**.

If you need information on how to **provide data for archiving and publication** please go to Data submission.

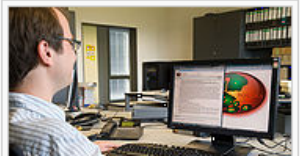
New users may start reading the following pages:

- Pangaea
- Data model
  - Project
  - Campaign
  - Event
  - Data series, Data set, Parent set
- Parameter, Parameter Dictionary
- Basic rules, Curator and Staff

see also:

- Articles and projects related to data management.
- A list of publications, presentations, posters and talks about Pangaea is maintained in ePIC.
- Recommendations, aphorisms and draft web pages.
- The STD-DOI project

Why using a Wiki for PANGAEA?

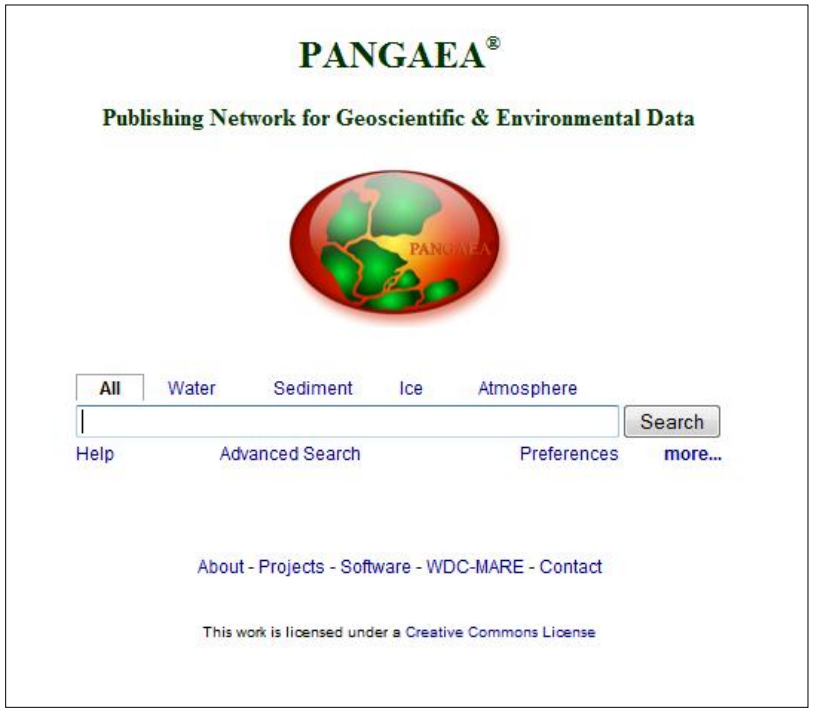


Operation of a complex system like Pangaea is a challenge and must be supported by documentation. In a first step, documentation was distributed through various pdf-files, web pages, and a (draft) manual (doi:10.1594/PANGAEA.319947). Also the BSCW system was used to exchange documentation and common files between various projects and curators. But a major problem of an up-to-date documentation is the fast development of the technology related to data systems and the Internet. Also new scientific requirements, sometimes just invented from scratch in running projects, need to be described. This could not be performed through the use of a static (and most of the time outdated) manual

METADATA & DATA DISSEMINATION

- Google-like & advanced metadata discovery (public)
- Data Warehouse for mass extraction (login required)
- Web-services to further disseminate public data to portals such as EMODNET & OBIS (taxonomy) and MegX (genomics)
- Web-services linking data publications and journal publications, e.g. Elsevier, Copernicus, AGU and Springer

METADATA & DATA DISSEMINATION



NEW SEARCH FEATURE

e.g. http://doi.pangaea.de/10.1594/PANGAEA.131744

METADATA & DATA DISSEMINATION

PANGAEA®
Data Publisher for Earth & Environmental Science

Logged in as **pesant** (log out, profile)

Always quote citation when using data!

Data Description

Show Map | Google Earth

Citation: Benthien, A et al. (2007): Fig. 8. The total C37-38 alkenone concentration per Emiliana huxleyi cell. doi:10.1594/PANGAEA.707296, *In Supplement to:* **Benthien, Albert; Zondervan, Ingrid; Engel, Anja; Hefter, Jens; Terbrüggen, Anja; Riebesell, Ulf (2007):** Carbon isotopic fractionation during a mesocosm bloom experiment dominated by Emiliania huxleyi: Effects of CO2 concentration and primary production. *Geochimica et Cosmochimica Acta*, **71(6)**, 1528-1541, doi:10.1016/j.gca.2006.12.015

Coverage: *Latitude:* 60.300000 * *Longitude:* 5.200000

Minimum ORDINAL NUMBER: 7 * *Maximum ORDINAL NUMBER:* 21

Event(s): **Raunefjord** * *Latitude:* 60.300000 * *Longitude:* 5.200000 * *Date/Time Start:* 2001-05-31T00:00:00 * *Date/Time End:* 2001-06-25T00:00:00 * *Location:* Europe, Norway * *Device:* Mesocosm experiment

Comment: Ordinal number is time in days

Parameter(s):

#	Name	Short Name	Unit	Principal Investigator	Method	Comment
1	ORDINAL NUMBER	No				Geocode
2	Alkenone per cell Emiliania huxleyi	C37+C38/E. huxleyi	pg/cell	Benthien, Albert	Pressurized liquid extraction	
3	Alkenone per cell Emiliania huxleyi	C37+C38/E. huxleyi	pg/cell	Benthien, Albert	Pressurized liquid extraction	
4	Alkenone per cell Emiliania huxleyi	C37+C38/E. huxleyi	pg/cell	Benthien, Albert	Pressurized liquid extraction	

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Size: 33 data points

Download Data

Download dataset as tab-delimited text *(use the following character encoding:* ISO-8859-1: ISO Western (PANGAEA default) *)*

View dataset as HTML

Contact

METADATA & DATA DISSEMINATION

PANGAEA®
Publishing Network for Geoscientific & Environmental Data

PANGAEA Login

Login is only required for access to data under moratorium.

Most of the data are freely available and can be used by referencing the related publication or the dataset citation. A few password protected data sets are under moratorium from ongoing projects. The description of each data set is always visible and includes the principle investigator (PI) to ask for access.

Users with protected data in PANGAEA may request f

Username: MedSea
Password: ••••••••••

Keep logged in on this computer

Contact

Data

Download dataset as tab-delimited text *(use the following character encoding:* ISO-8859-1: ISO Western (PANGAEA default) *)*

1 Date/Time	2 Depth water [m]	3 Sal	4 Temp [°C]	5 Alkalinity [mmol(eq)/l]	6 pH	7 TCO2 [µmol/l]	8 CO3**2- [µmol/l]	9 pCO2 [µatm]	10 SI Calcite	11 SI Aragonite
2000-10-13T10:00	0	34.1	25.8	2.364	8.03	2124.8	176.3	564	4.2	2.8
2000-10-13T14:20	0	33.9	26.7	2.299	8.15	1997.7	214.2	403	5.1	3.4
2000-10-13T19:25	0	35.6	25.9	2.350	8.14	2039.8	219.4	411	5.1	3.4
2000-10-14T00:00	0	33.8	25.0	2.349	8.00	2132.0	162.0	601	3.9	2.5
2000-10-14T05:55	0	34.3	24.6	2.343	8.07	2092.0	183.5	499	4.3	2.8
2000-10-14T11:35	0	34.9	25.9	2.355	8.05	2104.3	183.5	539	4.3	2.9
2001-07-20T23:00	0	33.8	26.1	2.344	8.05	2097.2	181.4	535	4.3	2.8
2001-07-21T03:00	0	33.8	25.7	2.323	7.92	2143.3	138.4	748	3.3	2.2
2001-07-21T07:00	0	33.8	25.1	2.311	8.01	2093.1	162.0	583	3.8	2.5
2001-07-21T11:00	0	33.8	26.4	2.341	8.12	2053.1	207.1	441	4.9	3.3
2001-07-22T15:00	0	34.3	27.4	2.350	8.25	1967.0	269.6	303	6.4	4.2
2001-07-22T19:00	0	34.3	26.9	2.351	8.16	2030.5	228.6	393	5.4	3.6
2001-07-22T23:00	0	34.3	26.3	2.327	8.13	2035.7	209.1	430	5.0	3.3
2001-07-23T03:00	0	34.3	26.0	2.315	7.93	2127.9	143.5	723	3.4	2.2
2001-07-23T07:00	0	34.3	25.9	2.327	8.05	2079.7	179.4	531	4.3	2.8
2001-07-23T11:00	0	34.3	27.4	2.298	8.22	1940.3	250.1	323	5.9	3.9
2001-07-23T15:00	0	34.3	28.8	2.301	8.28	1892.2	283.9	273	6.8	4.5
2001-07-23T19:00	0	34.3	27.7	2.279	8.16	1957.8	225.5	380	5.4	3.6

METADATA & DATA DISSEMINATION

All | Water | Sediment | Ice | Atmosphere

bioacid Search

Help Advanced Search Preferences more...

Logged in as **pesant** (log out, profile)

Always quote citation when using data!

15 datasets found on search for »bioacid«

Show Map | Google Earth | Data Warehouse

<< PREV | **1** | 2 | NEXT >>

1. **Hauck, J; Gerdes, D; Hillenbrand, C-D et al. (2011):** Calcium carbonate content in surface sediments and benthic fauna on Antarctic shelves
   Supplement to: **Hauck, J; Gerdes, D; Hillenbrand, C-D et al. (2011):** Distribution and mineralogy of carbonate sediments on Antarctic shelves. *Data submitted 2011-02-22, Journal of Marine Systems*
   Size: 2 datasets
   doi:10.1594/PANGAEA.757933 - Score: 100% - Similar datasets

2. **Svalbard 2010 team (2010):** EPOCA Svalbard mesocosm experiment in Kongsfjorden, Svalbard, Norway, 2010
   Size: 2 datasets
   Dataset #769833 *(DOI registration in progress)* - Score: 57% - Similar datasets

3. **Thomsen, J; Gutowska, MA; Saphörster, J et al. (2010):** Weekly growth of mussel Mytilus edulis, 2010
   Reference: **Thomsen, J; Gutowska, MA; Saphörster, J et al. (2010):** Calcifying invertebrates succeed in a naturally CO2-rich coastal habitat but are threatened by high levels of future acidification. *Biogeosciences*
   Size: 50 data points
   doi:10.1594/PANGAEA.763338 - Score: 43% - Similar datasets

4. **Thomsen, J; Gutowska, MA; Saphörster, J et al. (2010):** Seawater carbonate chemistry in Kiel fjord 2008-2009
   Reference: **Thomsen, J; Gutowska, MA; Saphörster, J et al. (2010):** Calcifying invertebrates succeed in a naturally CO2-rich coastal habitat but are threatened by high levels of future acidification. *Biogeosciences*
   Size: 131 data points
   doi:10.1594/PANGAEA.763337 - Score: 36% - Similar datasets

5. **Krug, S; Schulz, KG; Riebesell, U (2011):** Seawater carbonate chemistry and biological processes during experiments with Coccolithus braarudii, 2011
   Reference: **Krug, S; Schulz, KG; Riebesell, U (2011):** Effects of changes in carbonate chemistry speciation on Coccolithus braarudii: a discussion of coccolithophorid sensitivities. *Biogeosciences*
   Size: 930 data points
   doi:10.1594/PANGAEA.762350 - Score: 21% - Similar datasets

METADATA & DATA DISSEMINATION

PANGAEA®
Data Publisher for Earth & Environmental Science

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Data Warehouse Download *(BETA)* on query for »bioacid«

To start a data warehouse download, add geocodes *(colored red/blue)* and parameters to the configuration by dragging or double-clicking them. It is recommended to first choose a vertical geocode *(colored red)* to further reduce the list of available parameters. Order of geocodes and parameters in the download matrix may be changed by dragging rows in the configuration list. For best results put latitude/longitude in one of the first columns, as the download matrix is ordered by the primary geocode! Depending on size of result set, the query may take some time until file download starts. This interface is for testing puposes only and not yet finished, do not rely on its functionality! When using the data, be sure to cite all original datasets (the URL to metadata is given in the last column of the tab-delimited text file).

Available Parameters and Geocodes

Page 1 of 15 < prev 1 2 3 4 5 6 next >

Score	Parameter/Geocode	
	LATITUDE	
	LONGITUDE	
	DATE/TIME	
	DEPTH, sediment [m]	
100.0%	pH	
93.6%	Partial pressure of CO2 (water) at sea surface temperature (wet air) [µatm]	
88.3%	Calcite saturation state	
79.8%	Aragonite saturation state	
69.1%	Total carbon [µmol/kg]	
68.1%	Bicarbonate ion concentration [µmol/kg]	
62.8%	Temperature, water [°C]	
62.8%	Carbonate ion concentration [µmol/kg]	
60.6%	Carbon dioxide [µmol/kg]	
57.4%	Salinity	
57.4%	Total alkalinity [µmol/kg]	

Configuration

Page 0 of 0 < prev next >

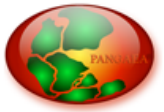
Parameter/Geocode	Method	
Please drag'n'drop geocodes and parameters here!		

☐ Implicit averaging
☐ Calculate standard deviation of averaged values

Download data in the following character encoding: ISO-8859-1: ISO Western (PANGAEA default)

Start Data Warehouse Query

METADATA & DATA DISSEMINATION



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Always quote citation when using data!

Data Warehouse Download *(BETA)* on query for »bioacid«

To start a data warehouse download, add geocodes *(colored red/blue)* and parameters to the configuration by dragging or double-clicking them. It is recommended to first choose a vertical geocode *(colored red)* to further reduce the list of available parameters. Order of geocodes and parameters in the download matrix may be changed by dragging rows in the configuration list. For best results put latitude/longitude in one of the first columns, as the download matrix is ordered by the primary geocode! Depending on size of result set, the query may take some time until file download starts. This interface is for testing puposes only and not yet finished, do not rely on its functionality! When using the data, be sure to cite all original datasets (the URL to metadata is given in the last column of the tab-delimited text file).

Available Parameters and Geocodes

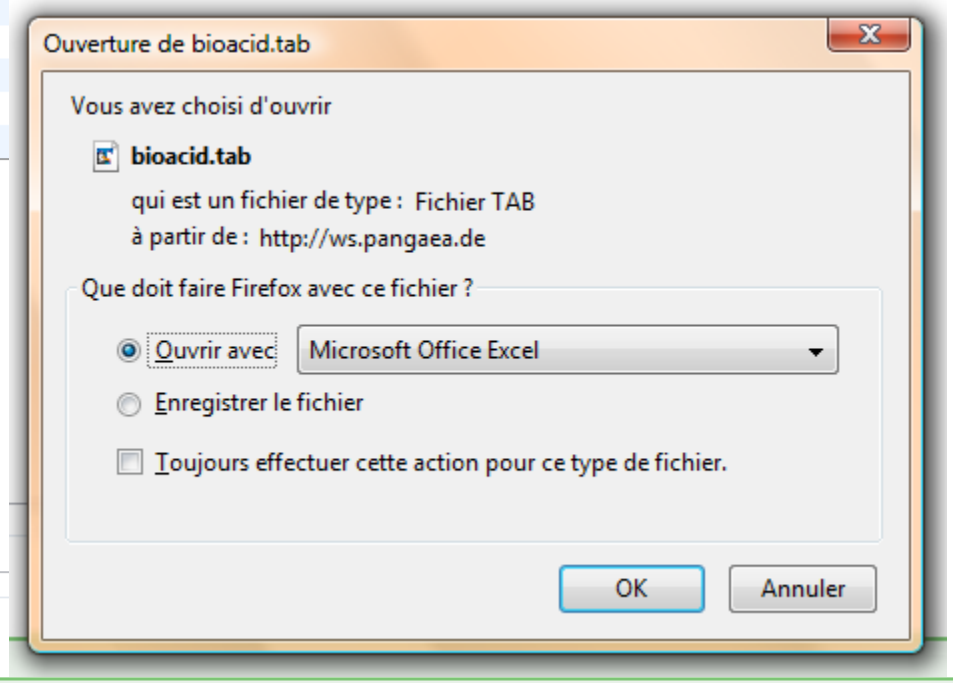
Page 1 of 15 < prev 1 2 3 4 5 6 next >

Score	Parameter/Geocode
	LATITUDE
	LONGITUDE
	DATE/TIME
	DEPTH, sediment [m]
100.0%	pH
93.6%	Partial pressure of CO2 (water) at sea surface temperature (wet air) [µatm]
88.3%	Calcite saturation state
79.8%	Aragonite saturation state
69.1%	Total carbon [µmol/kg]
68.1%	Bicarbonate ion concentration [µmol/kg]
62.8%	Temperature, water [°C]
62.8%	Carbonate ion concentration [µmol/kg]
60.6%	Carbon dioxide [µmol/kg]
57.4%	Salinity
57.4%	Total alkalinity [µmol/kg]

Configuration

Page 1 of 1 < prev 1 next >

Parameter/Geocode	Method
LATITUDE	
LONGITUDE	
DATE/TIME	
pH	
Temperature, water [°C]	
Total alkalinity [µmol/kg]	



Implicit averaging

Calculate standard deviation of averaged values

Download data in the following character encoding: ISO-8859-1 Western (PANGAEA default)

Start Data Warehouse Query

Contact

METADATA & DATA DISSEMINATION

- Each data point is fully citable with a DOI
- Cross-reference with journal articles
- Pre-publication, peer-review process
- Thomson Reuters and Elsevier will will soon launch Data Citation Impact Factors based on data DOI
- Creative Commons Attribution license which requires that datasets are cited when data are used & re-used

METADATA & DATA DISSEMINATION

PANGAEA®
Publishing Network for Geoscientific & Environmental Data

You are not logged in (LOG IN)

Always quote citation when using data!

Data Description

Show Map | Google Earth | RIS | BibTeX

Citation: Raffi, I (2002): Revision of the early-middle Pleistocene calcareous nannofossil biochronology. doi:10.1594/PANGAEA.690449,
Supplement to: **Raffi, Isabella (2002):** Revision of the early-middle Pleistocene calcareous nannofossil biochronology (1.75-0.85 Ma). *Marine Micropaleontology*, **45(1)**, 25-55, doi:10.1016/S0377-8398(01)00044-5

Abstract: The extant nannofossil biostratigraphic and biochronologic framework for the early-middle Pleistocene time interval has been tested through the micropaleontological analysis of globally distributed high-quality low- to mid-latitude deep-sea successions. The quantitative temporal distribution patterns of relative abundances of selected taxa were reconstructed in critical intervals, and the following biohorizons were defined: first occurrence of medium-sized Gephyrocapsa spp. (bmG); last occurrence of Calcidiscus macintyrei (tCm); first occurrence of large Gephyrocapsa spp. (blG); last occurrence of large Gephyrocapsa spp. (tlG); first occurrence of Reticulofenestra asanoi (bRa); re-entrance of medium-sized Gephyrocapsa spp. (reemG) and last occurrence of Reticulofenestra asanoi (tRa). The detailed patterns of abundance change at these biohorizons were used to generate a detailed biostratigraphy, and the biostratigraphic data were transformed into a precise biochronology by means of correlation to isotope stratigraphies and astronomical timescales. The degree of isochrony or diachrony of the biohorizons was evaluated. Biohorizons tlG and tRa are isochronous occurring close to marine isotope stages (MIS)55 and MIS 22, respectively, and bmG and blG are slightly diachronous on the order of 30-40 kyr, whereas biohorizons tCm, reemG and bRa are confirmed as diachronous on the order of 100, 80 and 60 kyr, respectively. Some of the events are clearly controlled by environmental conditions, e.g. the last occurrence of R. asanoi, related to significant environmental changes associated with the first large-amplitude glaciation of the late Quaternary, MIS 22.

Project(s): **Deep Sea Drilling Project** (DSDP)
Ocean Drilling Program (ODP)

Coverage: *Median Latitude:* 26.361828 * *Median Longitude:* -15.070243 * *South-bound Latitude:* 3.719017 * *West-bound Longitude:* -119.981000 * *North-bound Latitude:* 41.001200 * *East-bound Longitude:* 90.361167

License: Creative Commons Attribution 3.0 Unported

Size: 7 datasets

Download Data

Download **ZIP** file containing all datasets as tab-delimited text *(use the following character encoding:* ISO-8859-1: ISO Western (PANGAEA default) *)*

METADATA & DATA DISSEMINATION

Marine Micropaleontology
Volume 45, Issue 1, May 2002, Pages 25-55

doi:10.1016/S0377-8398(01)00044-5 | How to Cite or Link Using DOI

Revision of the early-middle pleistocene calcareous nannofossil biochronology (1.75–0.85 Ma)

Isabella Raffi

Dipartimento di Scienze della Terra, Università 'G. d'Annunzio', Chieti, Italy

Received 10 August 2001; accepted 5 October 2001. Available online 22 March 2002.

Abstract

The extant nannofossil biostratigraphic and biochronologic framework for the early-middle Pleistocene time interval has been tested through the micropaleontological analysis of globally distributed high-quality low- to mid-latitude deep-sea successions. The quantitative temporal distribution patterns of relative abundances of selected taxa were reconstructed in critical intervals, and the following biohorizons were defined: first occurrence of medium-sized *Gephyrocapsa* spp. (bmG); last occurrence of *Calcidiscus macintyrei* (tCm); first occurrence of large *Gephyrocapsa* spp. (blG); last occurrence of large *Gephyrocapsa* spp. (tlG); first occurrence of *Reticulofenestra asanoi* (bRa); re-entrance of medium-sized *Gephyrocapsa* spp. (reemG) and last occurrence of *Reticulofenestra asanoi* (tRa). The detailed patterns of

CONTRIBUTION TO SDN2

- Map PANGAEA metadata to CDI
- Contribute to develop tools to analyse / treat duplicates
- Identify and serve original datasets to SDN2
- Propose PANGAEA as a Thematic Data Processing Centre
- Contribute to develop real-time data flow (SensorML)

Thank you for your kind attention