

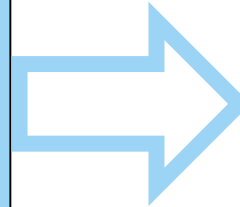
# DataCite – Persistent links to scientific data

Jan Brase

# DOI names for citations

## URLs are not persistent



- (e.g. Wren JD: **URL decay in MEDLINE- a 4-year follow-up study**. Bioinformatics. 2008, Jun 1;24(11):1381-5).



## The page cannot be found

The page you are looking for might have been removed, had its name changed, or is temporarily unavailable.

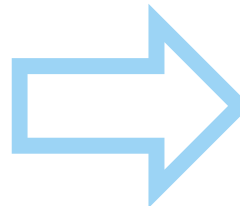
Please try the following:

- If you typed the page address in the Address bar, make sure that it is spelled correctly.
- Open the [httpd.apache.org](http://httpd.apache.org) home page, and then look for links to the information you want.
- Click the  [Back](#) button to try another link.
- Click  [Search](#) to look for information on the Internet.

HTTP 404 - File not found  
Internet Explorer

## Digital Object Identifiers (DOI names) offer a solution

- Mostly widely used identifier for scientific articles
- Researchers, authors, publishers know how to use them
- Put datasets on the same playing field as articles



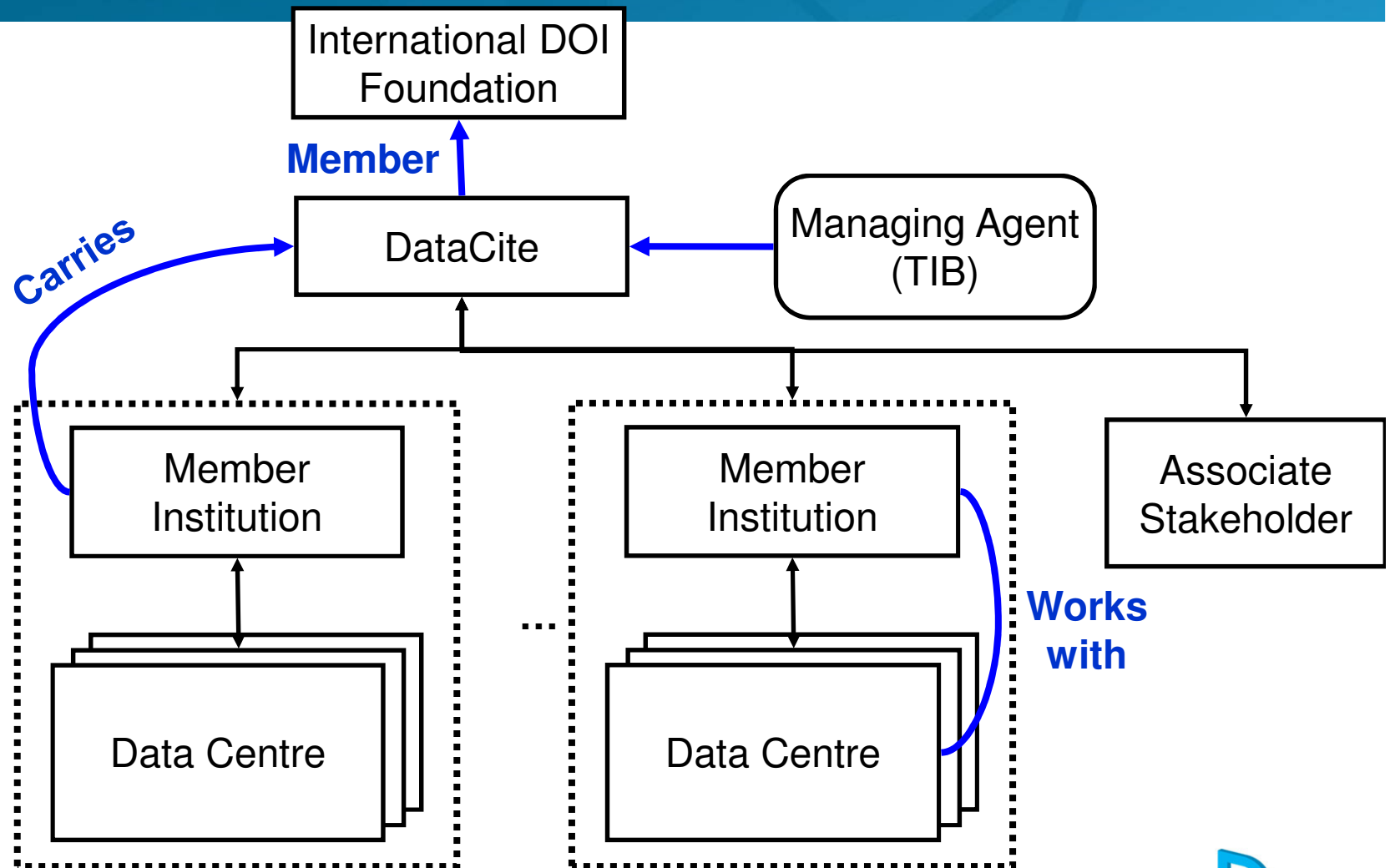
## Dataset

Yancheva et al (2007). Analyses on sediment of Lake Maar.  
PANGAEA.  
[doi:10.1594/PANGAEA.587840](https://doi.org/10.1594/PANGAEA.587840)

# DataCite

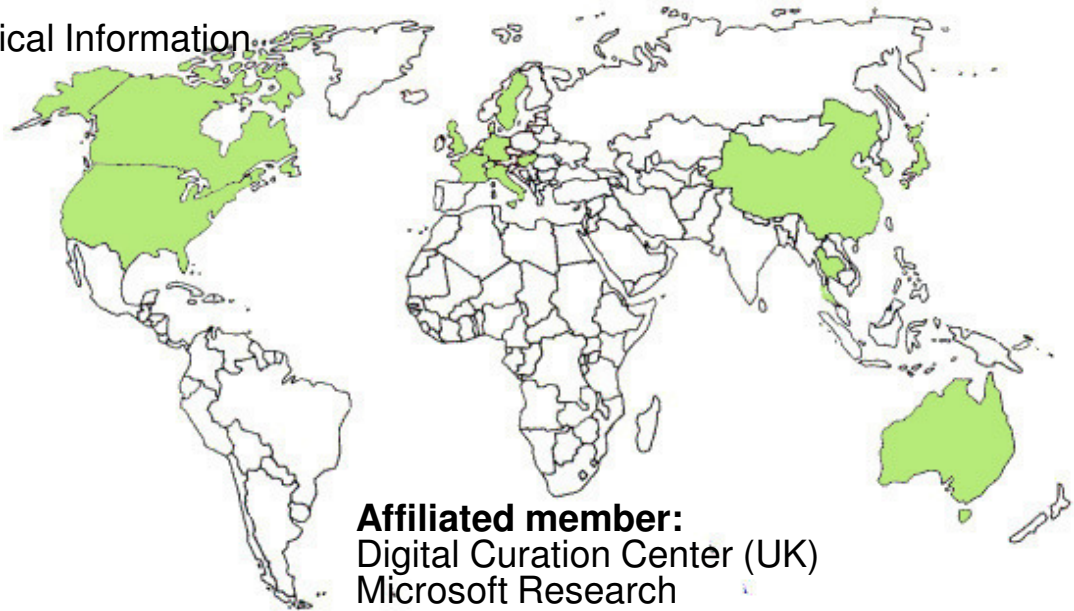
Global consortium carried by local institutions  
focused on improving the scholarly infrastructure  
around datasets and other non-textual  
information  
focused on working with data centres and  
organisations that hold content  
Providing standards, workflows and best-practice  
Initially, but not exclusively based on the DOI system  
Founded December 1st 2009 in London

# DataCite structure



# DataCite member

Technische Informationsbibliothek (TIB)  
Canada Institute for Scientific and Technical Information  
(CISTI),  
California Digital Library, USA  
Purdue University, USA  
Office of Scientific and Technical  
Information (OSTI), USA  
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Electronics Engineers (IEEE)  
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# DataCite in 2013

Over 2,000,000 DOI names registered so far.

262 data centers.

5,600,000 resolutions in 2013 so far.

DataCite Metadata schema published (in cooperation with all members) <http://schema.datacite.org>

DataCite MetadataStore

<http://search.datacite.org>



# DataCite search

Searchterm: \*

Searchterm: uploaded:[NOW-7DAY TO NOW]

Searchterm: relatedIdentifier:\*

Searchterm:  
relatedIdentifier:issupplementto\ :10.1029\*

Searchterm:relatedIdentifier:\*\ :10.1055\*



Sie befinden sich im Vollbildmodus. [Vollbildmodus beenden \(F11\)](#)

DataCite

## Filter

allocator

datacentre

prefix

resourceType

Dataset (14152)

Text (62)

Collection (25)

**InteractiveResource (1)**

Software (1)

contributor

creator

publicationYear

publisher

language

refQuality

has\_metadata

No active filters. Use the sidebar to filter search results.

37806 documents found in 531ms

Page 1 of 3781

[International Passenger Survey, 2012](#) [version 4th Edition] #1

[doi:10.5255/UKDA-SN-7087-5](#) Dataset : Computer File  
Office for National Statistics. Social Survey Division

[Ischiofemoral Impingement: Spectrum of Findings](#) #2

[doi:10.1594/ESSR2013/P-0002](#)  
Thomas, Alona

[Non-inflammatory disease is more common than sacroiliitis on MRI of the sacroiliac joints](#) #3

[doi:10.1594/ESSR2013/P-0003](#)  
Jans, Lennart

[Feasibility study of high resolution imaging of cartilage of the CMC1 joint at 7Tesla MRI](#) #4

[doi:10.1594/ESSR2013/P-0004](#)  
Korteweg, Mies

[MR arthrography correlated with arthroscopy in the evaluation of articular cartilage in patients with femoroacetabular impingement](#) #5

[doi:10.1594/ESSR2013/P-0005](#)  
Bintoudi, Antonia

[Anatomical study of the dorsal cutaneous branch of the ulnar nerve using ultrasonography](#) #6

[doi:10.1594/ESSR2013/P-0006](#)  
Bauones, Salem

["The Role of Dynamic Ultrasound and MRI in the poorly resolving ankle sprain."](#) #7

[doi:10.1594/ESSR2013/P-0007](#)  
Zietkiewicz, John

[Lumbar total disc replacement: Correlation of radiological parameters and clinical outcome](#) #8

[doi:10.1594/ESSR2013/P-0008](#)  
Hoffmann, Adrienne

[Imaging of posterior cruciate ligament \(PCL\) reconstruction: normal postsurgical appearance and complications](#) #9

[doi:10.1594/ESSR2013/P-0009](#)  
Alcalá-Galiano Rubio, Andrea

[Metatarsal pathologies. MRI findings](#) #10

[doi:10.1594/ESSR2013/P-0010](#)  
mejia, catalina

Page 1 of 3781





## doi:10.5255/UKDA-SN-7087-5

This page represents DataCite's metadata for doi: 10.5255/UKDA-SN-7087-5.

For a landing page of this dataset please follow <http://dx.doi.org/10.5255/UKDA-SN-7087-5>

### Citation

Office for National Statistics. Social Survey Division; (2013); International Passenger Survey, 2012; Colchester, Essex: UK Data Archive.

<http://dx.doi.org/10.5255/UKDA-SN-7087-5>  

### Resource type

#### Dataset

Computer File

#### Version

4th Edition

### Other formats

[text/html](#)

[application/x-datacite+xml](#)

[application/vnd.datacite.datacite+xml](#)

[application/x-datacite+text](#)

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[application/rdf+xml](#)

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DataCite

## Filter

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language

refQuality

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No active filters. Use the sidebar to filter search results.

467444 documents found in 5160ms

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[Chemical composition of basement rocks from ODP Leg 121, Ninetyeast Ridge, supplement to: Weis, D; Frey, Frederick A; Saunders, #1  
A; Gibson, Ian L \(1991\): Ninetyeast Ridge \(Indian Ocean\): A 5000 km record of a Dupal mantle plume. Geology, 19\(2\), 99-102](#)

[doi:10.1594/PANGAEA.711816](#) Collection : Supplementary Collection of Datasets

Weis, D • Frey, Frederick A • Saunders, A • Gibson, Ian L

*relatedIdentifier*: [IsSupplementTo:DOI:10.1130/0091-7613\(1991\)019<0099:NRIOAK>2.3.CO;2](#)

[Former Twyfords Site, Alsager](#) #2

[doi:10.5284/1017129](#) Text : Report

GUARD Archaeology Limited

*relatedIdentifier*: [IsPartOf:DOI:10.5284/1000328](#)

[GFDL\\_SRES\\_A2\\_DSWF \[version 1\]](#) #3

[doi:10.1594/WDC/GFDL\\_SRES\\_A2\\_DSWF](#) Dataset : Digital

Stouffer, Ronald

*relatedIdentifier*: [IsPartOf:DOI:10.1594/WDC/GFDL\\_SRES\\_A2](#)

[Electrical conductivity from IODP Hole 333-C0012E](#) #4

[doi:10.1594/PANGAEA.785885](#) Dataset : Dataset

Henry, Pierre • Kanamatsu, Toshiya • Moe, Kyaw Thu • Expedition 333 Scientists

*relatedIdentifier*: [IsCitedBy:URL:http://sio7.jamstec.go.jp](#)

[Magnetometer measurements from IODP Hole 333-C0012E](#) #5

[doi:10.1594/PANGAEA.785905](#) Dataset : Dataset

Henry, Pierre • Kanamatsu, Toshiya • Moe, Kyaw Thu • Expedition 333 Scientists

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[Chemistry measurements of pore water from IODP Hole 333-C0012E](#) #6

[doi:10.1594/PANGAEA.785909](#) Dataset : Dataset

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*relatedIdentifier*: [IsCitedBy:URL:http://sio7.jamstec.go.jp](#)

[Description and distribution of lithologic units from IODP Hole 333-C0012E](#) #7

[doi:10.1594/PANGAEA.785923](#) Dataset : Dataset

Henry, Pierre • Kanamatsu, Toshiya • Moe, Kyaw Thu • Expedition 333 Scientists

*relatedIdentifier*: [IsCitedBy:URL:http://sio7.jamstec.go.jp](#)

[\(Table AT1\) Planktonic foraminiferal stratigraphy of ODP Hole 182-1126B](#) #8

[doi:10.1594/PANGAEA.785911](#) Dataset : Dataset

Li, Qianyu • McGowran, Brian • Brunner, Charlotte A

*relatedIdentifier*: [IsPartOf:DOI:10.1594/PANGAEA.785833](#)

[\(Table AT2\) Planktonic foraminiferal stratigraphy of ODP Hole 182-1126C](#) #9

# OAI and Statistics

OAI Harvester

<http://oai.datacite.org>

DataCite statistics (resolution and registration)

<http://stats.datacite.org>

[Registrations by Allocators](#) | 
 [Registrations by Datacentres](#) | 
 [Registrations by Prefixes](#) | 
 [Resolutions by Month](#)

Allocator	DOI Registrations				Metadata Uploads				Metadata Ratio
	All Time	This Year	Last 30 Days	Last 7 Days	All Time	This Year	Last 30 Days	Last 7 Days	
ANDS - Australian National Data Service	2 617	102	7	0	1 711	102	7	0	65%
BL - The British Library	41 594	17 877	14 854	13 912	41 487	17 878	14 854	13 912	99%
CDL - California Digital Library	425 084	179 285	134 385	7 709	421 681	179 406	134 387	7 709	99%
CISTI - Canada Institute for Scientific and Technical Information	2 084	158	80	0	2 066	158	80	0	99%
CRUI - CRUI2011	7 698	4 597	4 108	1	4 571	1 470	981	1	59%
DATAcite - DataCite	7	0	0	0	7	0	0	0	100%
DELFT - TU Delft Library	7 193	4 501	119	24	6 917	4 503	121	26	96%
DK - Technical Information Center of Denmark	2 539	514	121	1	2 538	514	121	1	99%
ETHZ - ETH Zurich	411 233	32 531	1 374	562	411 230	79 964	17 156	15 787	99%
GESIS - GESIS - Leibniz Institute for the Social Sciences	7 459	1 404	1 000	20	7 198	1 538	1 000	20	96%
INIST - Institute for Scientific and Technical Information	395	295	29	17	395	295	29	17	100%
OSTI - Office of Scientific and Technical Information (OSTI), US Department of Energy	474	30	7	0	474	30	7	0	100%
PURDUE - Purdue University Library	2 204	1 766	80	45	2 203	1 766	80	45	99%
SND - Swedish National Data Service	2	1	0	0	2	1	0	0	100%
TIB - German National Library of Science and Technology	767 070	13 308	1 234	324	563 731	49 757	1 088	324	73%
ZBMED - German National Library of Medicine	27 098	3 542	641	7	26 986	3 586	641	7	99%
ZBW - Deutsche Zentralbibliothek für Wirtschaftswissenschaften – Leibniz-Informationszentrum Wirtschaft	51	15	0	0	26	15	0	0	50%
<b>Totals</b>	<b>1 704 802</b>	<b>259 926</b>	<b>158 039</b>	<b>22 622</b>	<b>1 493 223</b>	<b>340 983</b>	<b>170 552</b>	<b>37 849</b>	



# DataCite Statistics Beta

Registrations by Allocators

Registrations by Datacentres

Registrations by Prefixes

Resolutions by Month

April 2013

#	Prefix	Total attempted	Successful	Failed	Total unique DOIs	Unique DOI: successes	Unique DOI: failures	Top 10 DOIs: successes
1	10.6073 CDL.LTERNET	90	86	4	57	54	3	<ol style="list-style-type: none"> <li>10.6073/PASTA/D0581CA1C77A0D70DBE67B7581BEAF70 meta (6)</li> <li>10.6073/AA.KNB-LTER-KNZ.3.5 meta (6)</li> <li>10.6073/AA.KNB-LTER-KNZ.64.4 meta (3)</li> <li>10.6073/AA.KNB-LTER-SEV.289.1 meta (3)</li> <li>10.6073/PASTA/E0B7CA3AC90649E800B60DC399A8C183 meta (3)</li> <li>10.6073/PASTA/8D37C233AE7B4F39B8864C7310D87387 meta (3)</li> <li>10.6073/AA.KNB-LTER-BES.433.34 meta (2)</li> <li>10.6073/AA.KNB-LTER-CDR.16133.121 meta (2)</li> <li>10.6073/AA.KNB-LTER-SGS.145.1 meta (2)</li> <li>10.6073/AA.KNB-LTER-ARC.10025.2 meta (2)</li> </ol>
2	10.6072 CDL.SDSCSG	1	1	0	1	1	0	<ol style="list-style-type: none"> <li>10.6072/H0.MP.A004256.01 meta (1)</li> </ol>
3	10.6070 CDL.LABARCH	55	52	3	13	10	3	<ol style="list-style-type: none"> <li>10.6070/H4VD6WC9 meta (14)</li> <li>10.6070/H4CZ3532 meta (13)</li> <li>10.6070/H4DZ067F meta (8)</li> <li>10.6070/H4W37T8Q meta (5)</li> <li>10.6070/H4HQ3VW0 meta (4)</li> <li>10.6070/H47P8W9B meta (3)</li> <li>10.6070/H4CC0XMVY meta (2)</li> <li>10.6070/H400001VW meta (1)</li> <li>10.6070/H4V985ZZ meta (1)</li> <li>10.6070/H47H1GG7 meta (1)</li> </ol>
4	10.6075 CDL.RCIDC	3	3	0	1	1	0	<ol style="list-style-type: none"> <li>10.6075/W7154F0Q meta (3)</li> </ol>

# DataCite Content Service

Service for displaying DataCite metadata

Different formats (BibTeX, RIS, **RDF**, etc.)

Content Negotiation (through MIME-Typ)

- Access through DOI proxy (<http://dx.doi.org>)
- First implemented by CNRI and CrossRef:

Documentation:

<http://www.crosscite.org/cn/>



# 2012: STM, CrossRef and DataCite Joint Statement

1. To improve the availability and findability of research data, the signers encourage authors of research papers to **deposit researcher validated data in trustworthy and reliable Data Archives**.
2. The Signers encourage Data Archives to **enable bi-directional linking between datasets and publications** by using established and community endorsed unique persistent identifiers such as database accession codes and DOI's.
3. The Signers encourage publishers and data archives to make visible or increase **visibility of these links** from publications to datasets and vice versa

# Example

## **The dataset:**

Storz, D et al. (2009):

*Planktic foraminiferal flux and faunal composition of sediment trap L1\_K276 in the northeastern Atlantic.*

<http://dx.doi.org/10.1594/PANGAEA.724325>

## **Is supplement to the article:**

Storz, David; Schulz, Hartmut; Waniek, Joanna J; Schulz-Bull, Detlef; Kucera, Michal (2009): *Seasonal and interannual variability of the planktic foraminiferal flux in the vicinity of the Azores Current.*

Deep-Sea Research Part I-Oceanographic Research Papers, **56(1)**, 107-124,

<http://dx.doi.org/10.1016/j.dsr.2008.08.009>



Show thumbnails in outline

Abstract

Keywords

1. Introduction



2. Hydrography and ecology of the study area

2.1. Oceanography

2.2. Mixed-layer depth and primary production

2.3. Mesoscale variability of the AC/AFZ system

3. Material and methods

3.1. Sediment traps

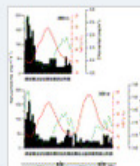
Table 1

3.2. Sample processing and data analysis

Table 2

4. Results

4.1. Bulk particle flux



ELSEVIER

## Deep Sea Research Part I: Oceanographic Research Papers

Volume 56, Issue 1, January 2009, Pages 107–124



### Seasonal and interannual variability of the planktic foraminiferal flux in the vicinity of the Azores Current

David Storz<sup>a,1</sup>, Hartmut Schulz<sup>a</sup>, , Joanna J. Waniek<sup>b</sup>, Detlef E. Schulz-Bull<sup>b</sup>, Michal Kučera<sup>a</sup>

<sup>a</sup> Institute for Geosciences, Sigwartstraße 10, D-72076 Tübingen, Germany

<sup>b</sup> Leibniz Institute for Baltic Sea Research Warnemünde, Seestraße 15, D-18119 Rostock, Germany

<http://dx.doi.org/10.1016/j.dsr.2008.08.009>, [How to Cite or Link Using DOI](#)

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#### Abstract

Planktic foraminiferal (PF) flux and faunal composition from three sediment trap time series of 2002–2004 in the northeastern Atlantic show pronounced year-to-year variations despite similar sea surface temperature (SST). The averaged fauna of the in 2002/2003 is dominated by the species *Globigerinita glutinata*, whereas in 2003/2004 the averaged fauna is dominated by *Globigerinoides ruber*. We show that PF species respond primarily to productivity, triggered by the seasonal dynamics of vertical stratification of the upper water column. Multivariate statistical analysis reveals three distinct species groups, linked to bulk particle flux, to chlorophyll concentrations and to summer/fall oligotrophy with high SST and stratification. We speculate that strategies of strictly asymbiotic, facultatively symbiotic, and symbiotic species may

- Bibliographic information
- Citing and related articles
- Applications and tools

#### PANGAEA<sup>o</sup> – Related Data

Planktic foraminiferal flux and faunal composition of sedim... northeastern Atlantic



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ImarisCell Software

Workspace



## Data Description

[Show Map](#) [Google Earth](#) [RIS](#) [BibTeX](#)

**Citation:** Storz, D et al. (2009): Planktic foraminiferal flux and faunal composition of sediment trap L1\_K276 in the northeastern Atlantic. doi:10.1594/PANGAEA.724325, Supplement to: Storz, David; Schulz, Hartmut; Waniek, Joanna J; Schulz-Bull, Detlef; Kucera, Michal (2009): Seasonal and interannual variability of the planktic foraminiferal flux in the vicinity of the Azores Current. *Deep Sea Research Part I: Oceanographic Research Papers*, 56(1), 107-124, doi:10.1016/j.dsr.2008.08.009

**Abstract:** Planktic foraminiferal (PF) flux and faunal composition from three sediment trap time series of 2002-2004 in the northeastern Atlantic show pronounced year-to-year variations despite similar sea surface temperature (SST). The averaged fauna of the in 2002/2003 is dominated by the species *Globigerinita glutinata*, whereas in 2003/2004 the averaged fauna is dominated by *Globigerinoides ruber*. We show that PF species respond primarily to productivity, triggered by the seasonal dynamics of vertical stratification of the upper water column. Multivariate statistical analysis reveals three distinct species groups, linked to bulk particle flux, to chlorophyll concentrations and to summer/fall oligotrophy with high SST and stratification. We speculate that the distinct nutrition strategies of strictly asymbiotic, facultatively symbiotic, and symbiotic species may play a key role in explaining their abundances and temporal succession. Advection of water masses within the Azores Current and species expatriation result in a highly diverse PF assemblage. The Azores Frontal Zone may have influenced the trap site in 2002, indicated by subsurface water cooling, by highest PF flux and high flux of the deep-dwelling species *Globorotalia scitula*. Similarity analyses with core top samples from the global ocean including 746 sites from the Atlantic suggest that the trap faunas have only poor analogs in the surface sediments. These differences have to be taken into account when estimating past oceanic properties from sediment PF data in the eastern subtropical North Atlantic.

**Project(s):** [Paleoceanography at Tübingen University \(GeoTü\)](#)

**Coverage:** *Latitude:* 30.000000 \* *Longitude:* -22.000000

*Date/Time Start:* 2002-02-24T00:00:00 \* *Date/Time End:* 2004-03-16T00:00:00

**Event(s):** [L1\\_K276](#) \* *Latitude:* 30.000000 \* *Longitude:* -22.000000 \* *Date/Time Start:* 2002-02-24T00:00:00 \* *Date/Time End:* 2004-04-01T00:00:00 \* *Elevation:* -5300.0 m \* *Location:* NE Atlantic - Azores Front \* *Device:* Trap, sediment \* *Comment:* Station used since 1980

**License:** [Creative Commons Attribution 3.0 Unported](#)

**Size:** 6 datasets



## Download Data

Download [ZIP](#) file containing all datasets as tab-delimited text (use the following character encoding: )

## Datasets listed in this Collection

# Next steps

ODIN project with ORCID.

<http://datacite.labs.orcid-eu.org/>

MoU with Thomson reuters to cooperate on data citation index

DataCite plugin for next D-Space release (early 2014)



# Thank you!

