

# **MaNIDA** - Marine Network for Integrated Data Access

## **Data Portal German Marine Research**

### **Status quo and perspectives**

# Status

- Central search and access of **data** and **publications** of German marine research via the **data portal**
- Helmholtz Impulse & Networking Fund 2012 – 2015
- Focus on research vessels and platforms
- Actual 4 data providers and 4 repositories
- Open consortia:



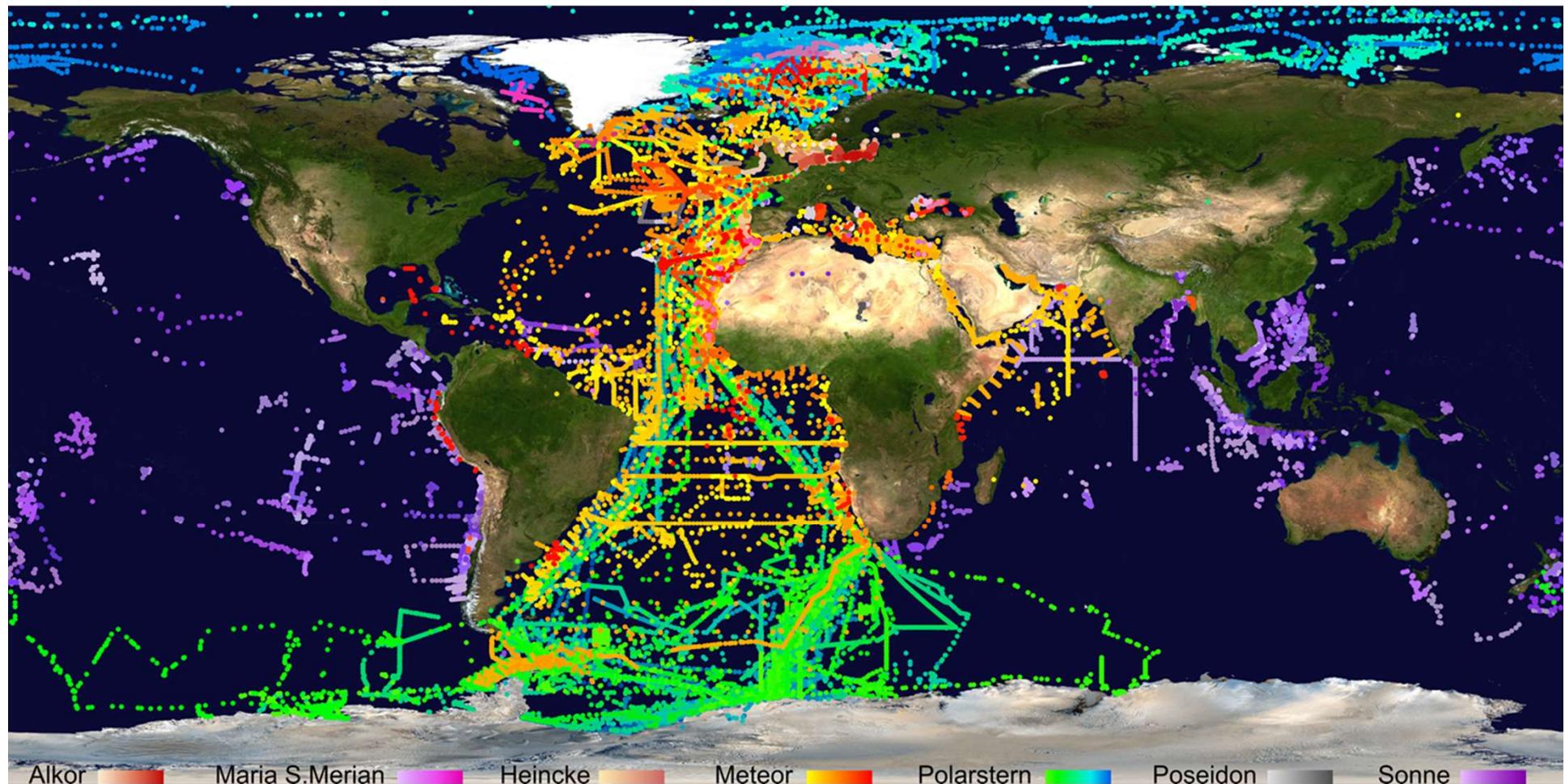
Helmholtz-Zentrum für Ozeanforschung Kiel



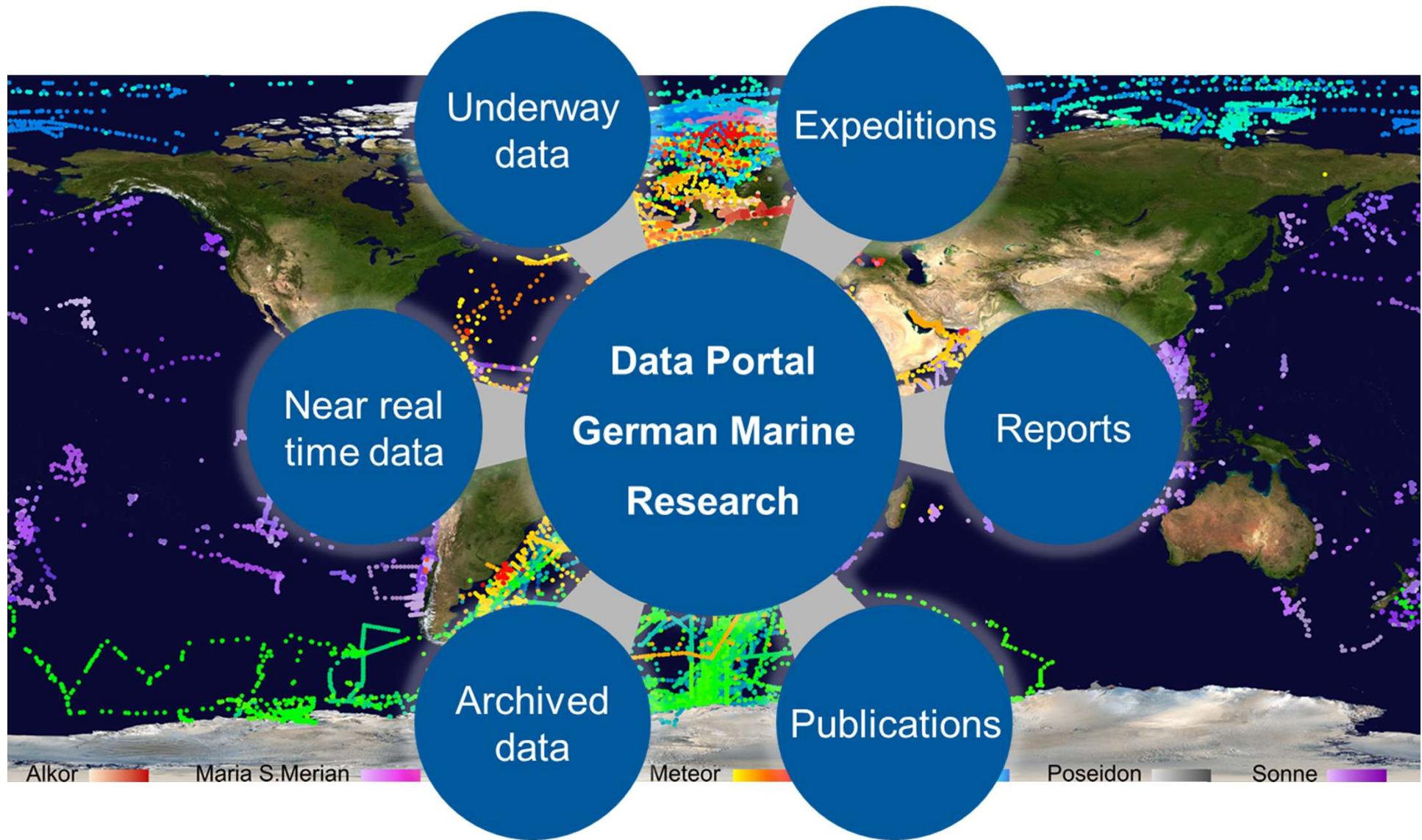
...



# Access to marine research data



# Access to marine research data

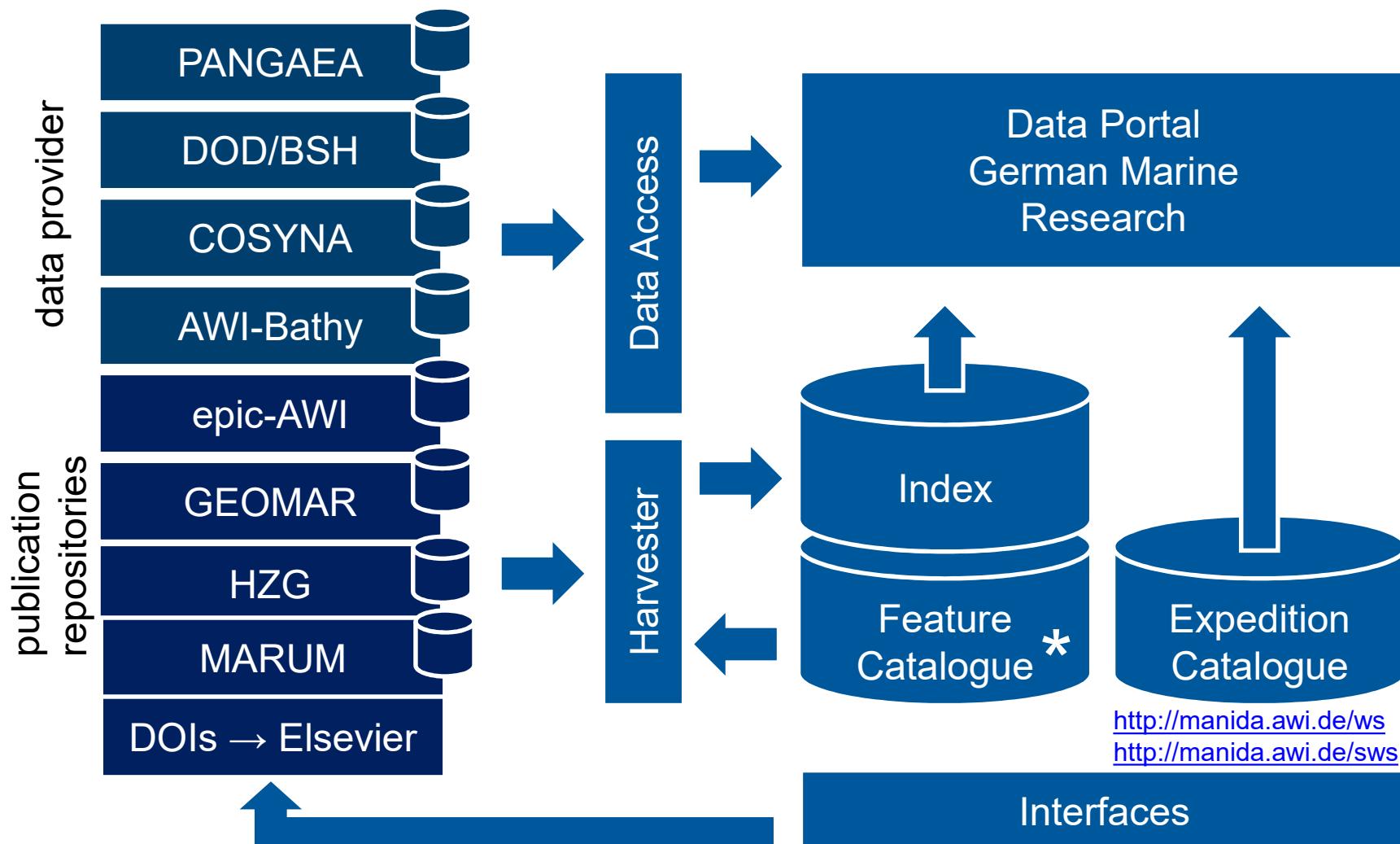


# MaNIDA – cross-partner working groups



- **Portal** – architecture, interfaces, standards
- **Catalogue** – expedition meta data, reports, CSR
- **Underway Daten** – DShip, devices, validation
- **Hydro acoustics** – case study bathymetry data
- **Harmonisation** – vocabularies, quality, standards and aggregation of data
- **Monitoring** and near real-time data (German Bight)
- **Data Curation Center → Landstation**
- **Policies** and directives

# Architecture



\* Harmonisation

Data Portal German Marine Resea... X MaNIDA Search Web Services X Expedition Web Services X +

manida.awi.de/sws Suchen ABP RSS O

# Expedition Search Web Services

Expedition Search Web Services provide interfaces to indexed metadata.

## Introduction

Expedition Search Web Services (ESWS) allow searching metadata of indexed objects. Search results will be returned in JSON format.  
Note: since the services are based on harvested metadata they might not be up-to-date.

The available services are:

- [search](#) for searching harvested and indexed objects.
- [expedition](#) for searching indexed expedition metadata.
- [platform](#) for searching indexed platform metadata.

A result object is structured as the following example shows.

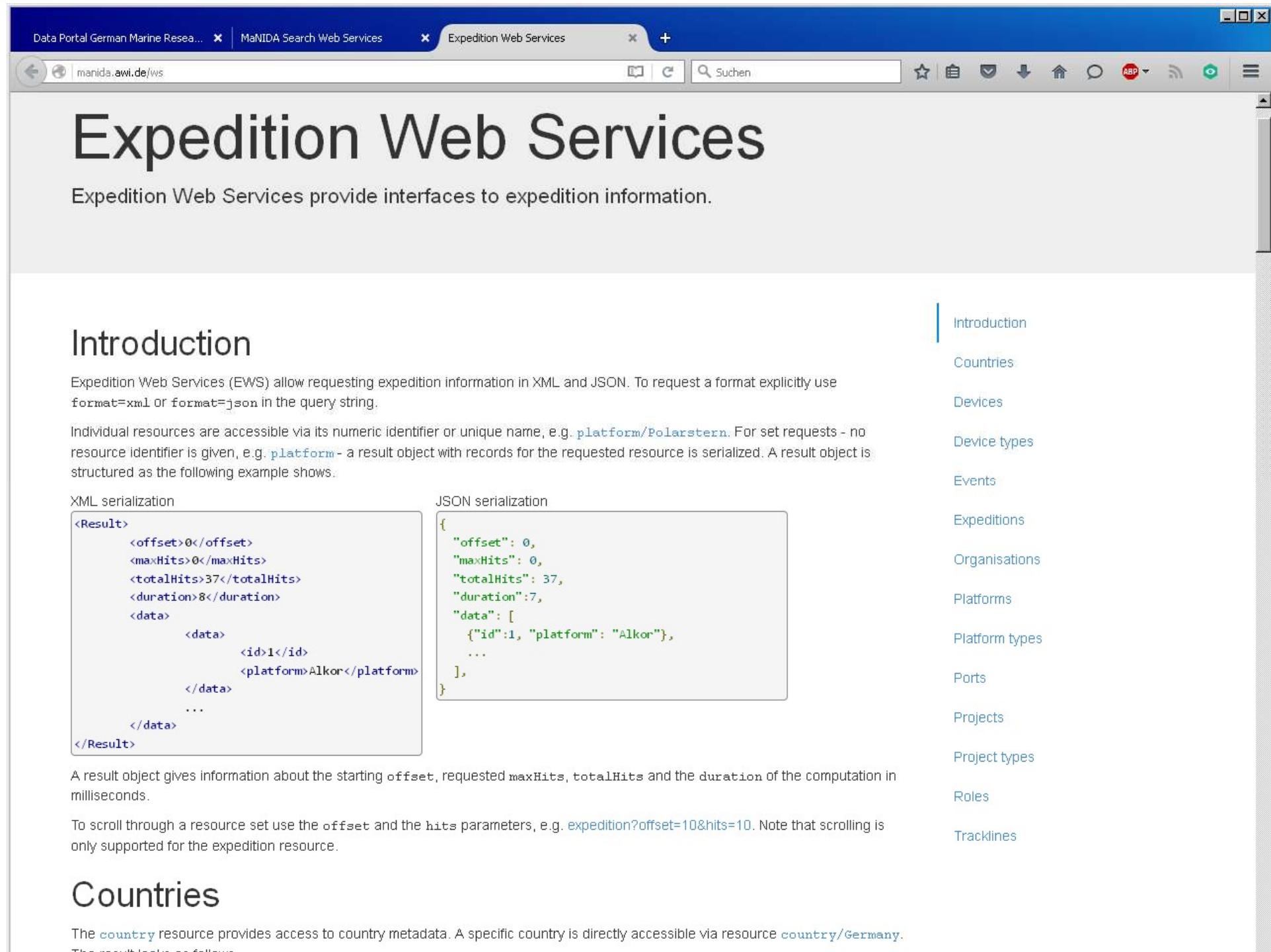
```
{  
  "offset": 0,  
  "maxHits": 0,  
  "totalHits": 37,  
  "duration": 7,  
  "data": [  
    ...  
  ],  
  "suggested": false,  
  "suggestion": null  
}
```

A result object gives information about the starting `offset`, requested `maxHits`, `totalHits` and the duration of the computation in milliseconds. The field `suggested` will be `true` if no hits for a given query where found. For less or equal than five hits a did-you-mean query will be performed and the suggestion is available in the `suggestion` field.

To scroll through a resource set use the `offset` and the `hits` parameters, e.g. `search?offset=10&hits=10`.

The following parameters are available.

Parameter	Description	Example
<code>query</code>	Searches for the given full text query	<code>search?query=polar</code>



Bookmark your search

## ▼ Provider

- PANGAEA (340425)
- EPIC (33735)
- OCEANREP (17051)
- COSYNA (15628)
- HZG (4953)
- more facets...

## ▼ Region

- Atlantic Ocean (106392)
- Mainland Europe (82296)
- European Mainland (82268)
- Pacific Ocean (77345)
- Arctic Ocean (30622)
- more facets...

## ▼ Author

- Shipboard Scientific Party (26698)
- WOCE Sea Level, WSL (19649)
- Hofmann, Jutta (19568)
- König-Langlo, Gert (16283)
- Schweingruber, Fritz Hans (13004)
- more facets...

## ▼ Platform

- JOIDES Resolution (40912)
- Polarstern (31110)
- Glomar Challenger (17858)
- Meteor (1986) (12435)
- Thomas G. Thompson (8454)
- more facets...

## ▼ Expedition

No facets selected.

Sort by best match date

Grandparental effects in marine sticklebacks: transgenerational plasticity across multiple generations (2015)

Shama, Lisa N. S.; Wegner, K. Mathias

hdl:10013/epic.44277

[pdf](#) [view object](#)

Numerical cell model investigating cellular carbon fluxes in *Emiliania huxleyi* (2015)

Holtz, Lena-Maria; Wolf-Gladrow, Dieter; Thoms, Silke

hdl:10013/epic.44276

[pdf](#) [view object](#)

Gas hydrate distributions in sediments of pockmarks from the Nigerian margin – Results and interpretation from shallow drilling (2015)

Wei, Jiangong; Pape, Thomas; Sultan, Nabil; Colliat, Jean-Louis; Himmller, Tobias; Ruffine, Livio; de Prunelé, Alexis; Dennielou, Bernard; Garziglia, Sébastien; Marsset, Tania; Peters, Carl A; Rabiu, Abdulkarim; Bohrmann, Gerhard

[view object](#)

Lessons from stakeholder dialogues on marine aquaculture in offshore wind farms: Perceived potentials, constraints and research gaps (2015)

Wever, Lara; Krause, Gesche; Buck, Bela H.

hdl:10013/epic.44211

[view object](#)

Assimilating summer sea-ice concentration into a coupled ice-ocean model using a LSEIK filter (2015)

Yang, Qinghua; Loza, Svetlana N.; Losch, Martin; Liu, Jiping; Zhang, Zhanhai; Nerger, Lars; Yang, Hu

hdl:10013/epic.43865

## ▼ Geographic coverage



filter by map bounding box

## ▼ Temporal coverage

Begin

End

filter by temporal coverage

## ▼ Keywords

measurements odp tree  
station water ring  
hole sea width  
abies sediment sample  
cruise historical object  
historical object table

[Bookmark your search](#)

▼ Provider

- PANGAEA (340425)
- EPIC (33735)
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- more facets...

▼ Expedition

No facets selected.

Sort by  

## Facets, e.g.

- region
- expedition
- device
- parameter
- author / PI
- Geographic and temporal coverage
- ...

Geographic coverage

[Google](#)[Kartendaten](#)[Nutzungsbedingungen](#) filter by map bounding box

Temporal coverage

Begin End  filter by temporal coverage

Keywords

measurements odp tree  
**station** water ring  
hole sea width  
abies sediment **cruise** sample  
historical object cor tabl

[Search](#)[Bookmark your search](#)**▼ Provider**

- [PANGAEA \(340425\)](#)
- [EPIC \(33735\)](#)
- [OCEANREP \(17051\)](#)
- [COSYNA \(15628\)](#)
- [HZG \(4953\)](#)
- [more facets...](#)

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- [Pacific Ocean \(77345\)](#)
- [Arctic Ocean \(30622\)](#)
- [more facets...](#)

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- [Thomas G. Thompson \(8454\)](#)
- [more facets...](#)

**▼ Expedition**

No facets selected.

Sort by [best match](#) [date](#)

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hdl:10013/epic.44276

[pdf](#) [view object](#)

[Gas hydrate distributions in sediments of pockmarks from the Nigerian margin – Results and interpretation from shallow drilling \(2015\)](#)

**▼ Geographic coverage**

## Information on and citation of data sets

- Meta data
- Digital Object Identifiers DOI, global handles
- Direct data download link (data provider redirect)
- Relationships to other objects and publications
- ...

Search

▼ Platform

Polarstern (250)

▼ Chief scientist

Fahrbach, E. (13)

Fütterer, D. K. (12)

Jokat, W. (12)

Hempel, G. (11)

Kattner, G. (9)

more facets...

▼ Begin port

Cape Town (63)

Bremerhaven (62)

Punta Arenas (46)

Tromsø (34)

Longyearbyen (18)

more facets...

▼ End port

Cape Town (63)

Bremerhaven (60)

Punta Arenas (45)

Tromsø (32)

Longyearbyen (19)

more facets...

▼ Project

EPOS I (3)

SCACE (2)

AMORE (1)

ANDEEP 1 (1)

ANDEEP 2 (1)

Selected facets: Polarstern

Platform	Expedition	Alias	Begin	End	Chief scientist(s)	
Polarstern	PS94	ARK-XXIX/3; BSH20150013	2015-08-16 - Tromsø	2015-10-15 - Bremerhaven	Schauer, U.	<a href="#">Events</a>   <a href="#">Data</a>   <a href="#">Map</a>   <a href="#">Publications</a>
Polarstern	PS93	ARK-XXIX/2; BSH20150012	2015-06-30 - Tromsø	2015-08-14 - Tromsø	Soltwedel, T.	<a href="#">Events</a>   <a href="#">Data</a>   <a href="#">Map</a>   <a href="#">Publications</a>
Polarstern	PS92	ARK-XXIX/1; BSH20150011	2015-05-19 - Bremerhaven	2015-06-28 - Tromsø	Peeken, I.	<a href="#">Events</a>   <a href="#">Data</a>   <a href="#">Map</a>   <a href="#">Publications</a>
Polarstern	PS91	ANT-XXX/4; BSH20150010	2015-03-18 - Punta Arenas	2015-04-19 - Bremerhaven	Knust, R.	<a href="#">Events</a>   <a href="#">Data</a>   <a href="#">Map</a>   <a href="#">Publications</a>

## Harmonisation and identification of

- Expedition information meta data
- national/intern. identifiers, CSR
- devices
- parameters/attributes
- projects

M

[Events](#) | [Data](#) | [Map](#) |  
[Publications](#)

▼ Platform type

- station (26)
- research vessel (16)
- magnet (12)
- ferrybox (10)
- buoy (6)
- more facets...

▼ Operator

- Helmholtz-Zentrum Geesthacht (27)
- Alfred Wegener Institute for Polar and Marine Research (26)
- Bundesamt für Seeschifffahrt und Hydrographie (12)
- GEOMAR - Helmholtz-Zentrum für Ozeanforschung Kiel (4)
- Leibniz-Institut für Ostseeforschung Warnemünde (IOW) (1)
- more facets...

▼ Owner

- Helmholtz-Zentrum Geesthacht (27)
- Alfred Wegener Institute for Polar and Marine Research (24)
- Bundesamt für Seeschifffahrt und Hydrographie (12)
- Bundesministerium für Bildung und Forschung (4)
- Mecklenburg-Vorpommern (2)
- more facets...

Search

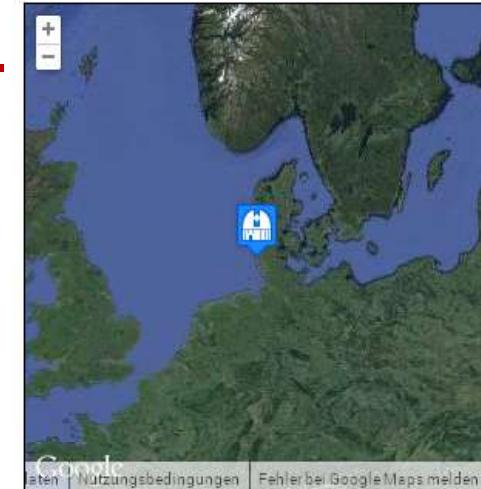
No facets selected.

Platform

Operator

Owner

Alkor	GEOMAR - Helmholtz-Zentrum für Ozeanforschung Kiel Alfred Wegener Institute for Polar and Marine Research	Schleswig-Holstein Alfred Wegener Institute for Polar and Marine Research
Biologische Anstalt Helgoland		
Buoy BunkerHill1	Helmholtz-Zentrum Geesthacht	Helmholtz-Zentrum Geesthacht
Buoy DarsserSchwelle1	Helmholtz-Zentrum Geesthacht	Helmholtz-Zentrum Geesthacht
Buoy Hoernum1	Helmholtz-Zentrum Geesthacht	Helmholtz-Zentrum Geesthacht
Buoy Jade1	Helmholtz-Zentrum Geesthacht	Helmholtz-Zentrum Geesthacht
Buoy List1	Helmholtz-Zentrum Geesthacht	Helmholtz-Zentrum Geesthacht
Buoy PanamaColon1	Helmholtz-Zentrum Geesthacht	Helmholtz-Zentrum Geesthacht
Dallmann	Alfred Wegener Institute for Polar and Marine Research	Alfred Wegener Institute for Polar and Marine Research
Elisabeth Mann Borgese	Leibniz-Institut für Ostseeforschung Warnemünde (IOW)	Mecklenburg-Vorpommern
Ferrybox at Cuxhaven	Helmholtz-Zentrum Geesthacht	Helmholtz-Zentrum Geesthacht
Ferrybox at FINO3	Helmholtz-Zentrum Geesthacht	Helmholtz-Zentrum Geesthacht
Ferrybox at Helgoland (provided by AWI)		



Web services of research platforms for operational and NRT-data to find and access directly

All Data Publications Expeditions Platforms More services ▾ About

## Case study - German Bight

Zentrum für Material- und Küstenforschung

February, 2016						
<		Today			> >	
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29						

Date: 09 Feb 2016						
Time: 19:00h ±5min						
00:00	06:00	12:00	18:00			
01:00	07:00	13:00	19:00			
02:00	08:00	14:00	20:00			
03:00	09:00	15:00	21:00			
04:00	10:00	16:00	22:00			
05:00	11:00	17:00	23:00			



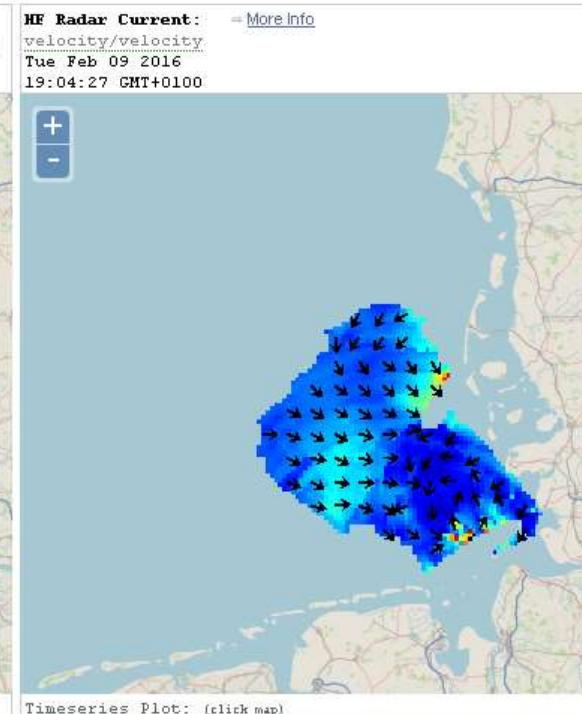
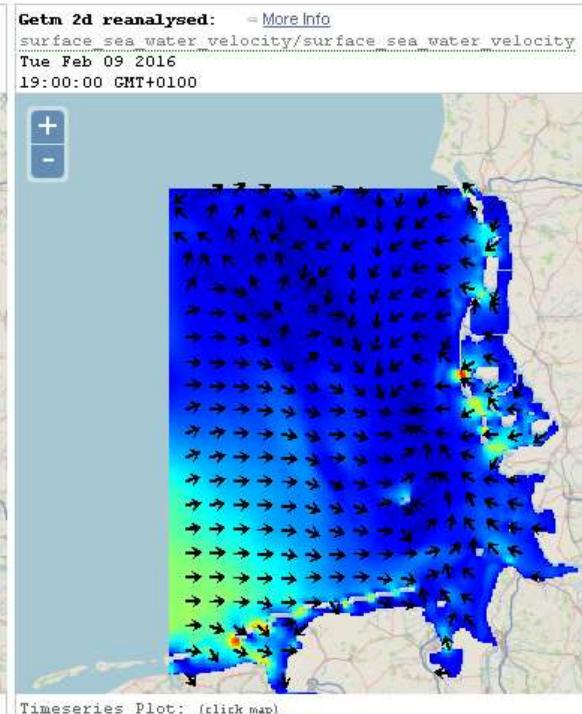
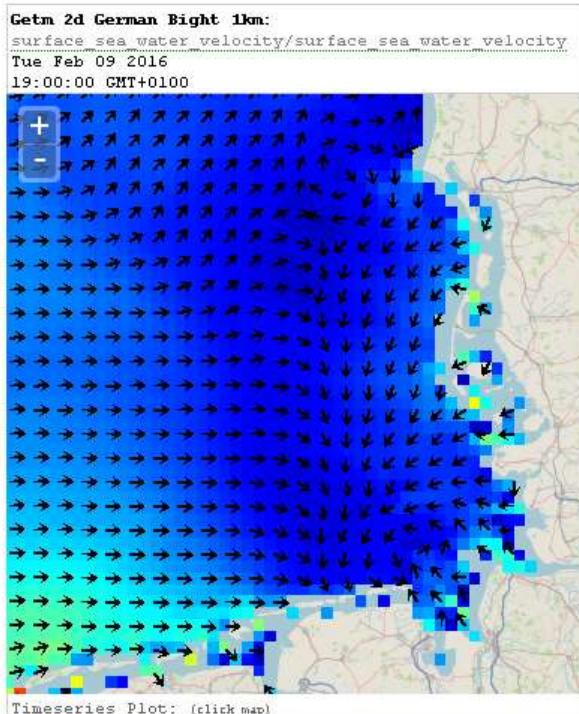
Comparison of the current vector field from the free Getrm model run (left), HF Radar measured (right) and the Getrm run with assimilated HF data (middle)

COSYNA



Lon: -  
Lat: -

Fix Scale Range  Append Plots  Save | Load ?



# User integration

- ✓ **We address marine scientists and scientific networks**
- ✓ **and regulating funding and policy actors**
- Small user-workshops (institutional level, working groups and graduate schools)
- Questionnaire for discussion and user survey (✓)
- Usage tracking - data portal (✓)  
(200 users/month → 150 redirects to data providers)
- Feedback-function - data portal (✓ → ticketing is planned)
- Presentation at funders, congresses, steering committees  
→ KDM, BMBF, HGF-Dialogplattform Erde-Umwelt
- Integration of/in EU- and international data infrastructures

# Usage tracking in the data portal

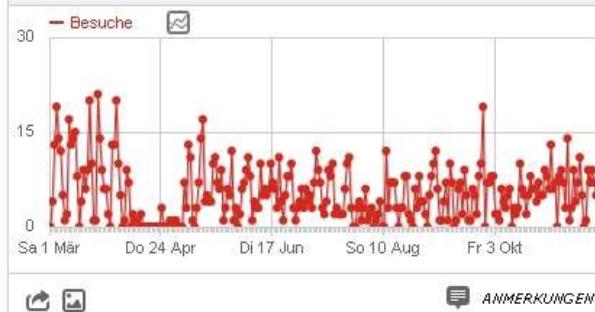
ZEITSPANNEN: VON 2014-03-01 BIS 2014-11-21

ALLE BESUCHE

WIDGETS &amp; DASHBOARD

NEUE VERSION: PIWIK 2.9.1

## Graph der letzten Besuche



## Besucher in Echtzeit

DATUM	BESUCHE	SEITENANSICHTEN
-------	---------	-----------------

Letzte 24 Stunden	5	13
-------------------	---	----

Letzte 30 Minuten	0	0
-------------------	---	---

Fr 21 Nov - 15:02:58 DE Chrome - IP: 139.17.116.0

von Google - "Suchbegriff nicht definiert"

Seiten: 1

Fr 21 Nov - 15:02:58 DE Chrome - IP: 139.17.116.0

Direkte Zugriffe

Seiten: 1

Fr 21 Nov - 13:37:23 DE Chrome - IP: 139.17.116.0

von Google - "Suchbegriff nicht definiert"

Seiten: 1

Fr 21 Nov - 11:10:47 (5 Minuten 52s) DE Chrome - IP: 139.17.116.0

von Google - "Suchbegriff nicht definiert"

Seiten: 1

## Liste der Suchbegriffe

SUCHBEGRIFF	BESUCHE
Suchbegriff nicht definiert	365
manida	18
meeresgeo	2
.wwwmanida.com	1
ark-xxviii/4 stein	1
data portal manida	1
hausgarten data portal	1
helmholtz zentrum geesthacht michael schulz	1
manida, awi	1
marine portal german marine research	1

1-10 von 12 NÄCHSTE &gt;



## Liste externer Webseiten

WEBSITE	BESUCHE
semalt.semalt.com	46
www.geomar.de	20
www.awi.de	18
www.embrc.eu	18
buttons-for-website.com	10
www.bsh.de	9
www.eskp.de	9
www.pubflow.uni-kiel.de	7
musica.descarqar-musica-qgratis.net	4

## Besucherkarte



# Feedback function

All Data Services Help

More services About Feedback

Chlorophyll

Search

Bookmark your search

Provider

- PANGAEA (14906)
- COSYNA (2143)
- DOD (337)
- EPIC (224)
- OCEANREP (127)
- more facets...

Region

- Atlantic Ocean (5021)
- Pacific Ocean (4572)
- Indian Ocean (1732)
- Southern Ocean (1526)
- Mediterranean Region (1067)
- more facets...

Author

- Krasemann, Hajo (2143)
- IFREMER (1683)
- Balch, William M (1603)
- BODC (1317)
- O'Reilly, J (1047)
- more facets...

Platform

- Thomas G. Thompson (1493)
- Discovery (1962) (1157)
- Meris on Envisat (1118)
- Modis on Aqua or Terra (1025)
- Nathaniel B. Palmer (716)
- more facets...

Expedition

- D192 (399)
- TT011 (369)
- TT007 (304)
- Historical\_Chile (301)
- NBP97-08 (218)
- more facets...

Device

Sort by best match date

Pigment concentrations at station NIOP-B1\_209-1 (2003)

Baars, Martien A; van der Spoel, Siebrecht, Veldhuis, Marcel  
doi:10.1594/PANGAEA.94554

[tsv](#) [view object](#)

Pigment concentrations at station NIOP-B1\_240-1 (2003)

Baars, Martien A; van der Spoel, Siebrecht, Veldhuis, Marcel  
doi:10.1594/PANGAEA.94559

[tsv](#) [view object](#)

Pigment concentration

Baars, Martien A; van der Spoel, Siebrecht, Veldhuis, Marcel  
doi:10.1594/PANGAEA.94561

[tsv](#) [view object](#)

Pigment concentration

Baars, Martien A; van der Spoel, Siebrecht, Veldhuis, Marcel  
doi:10.1594/PANGAEA.94566

[tsv](#) [view object](#)

Pigment concentration

Baars, Martien A; van der Spoel, Siebrecht, Veldhuis, Marcel  
doi:10.1594/PANGAEA.94580

[tsv](#) [view object](#)

Pigments measured on water bottle samples at station TT043\_20-3 (2003)

Goericke, Ralf  
doi:10.1594/PANGAEA.117899

[tsv](#) [view object](#)

Pigments measured on water bottle samples at station TT043\_21-20 (2003)

Goericke, Ralf  
doi:10.1594/PANGAEA.117902

[tsv](#) [view object](#)

Pigments measured on water bottle samples at station TT043\_22-1 (2003)

Goericke, Ralf  
doi:10.1594/PANGAEA.117907

[tsv](#) [view object](#)

Pigments measured on water bottle samples at station TT043\_26-16 (2003)

Goericke, Ralf

I have a suggestion

I like

I found a bug

Please provide some details. We will use the details to learn more about our users.

Your profession:

Your email address:

Submit your feedback

Sorry, I have no feedback

Geographic coverage



filter by map bounding box

Temporal coverage

Begin 2014-11-21

End 2014-11-21

filter by temporal coverage

Keywords

Relationships

Object overview

Expeditions

NIOP-B1

Platforms

Tyro

Provider

PANGAEA

# User dialog

- Improvement of data content (repositories)
    - Where are my data?
    - Why there aren't any data of ...?
      - Could you share and publish your data?
  - Insufficient harmonisation/categorising to find/aggregate data
    - I can't find data under this term or name!
    - The data don't fit together!
- User requests ↔ ongoing improvements
- Priorities ↔ resources

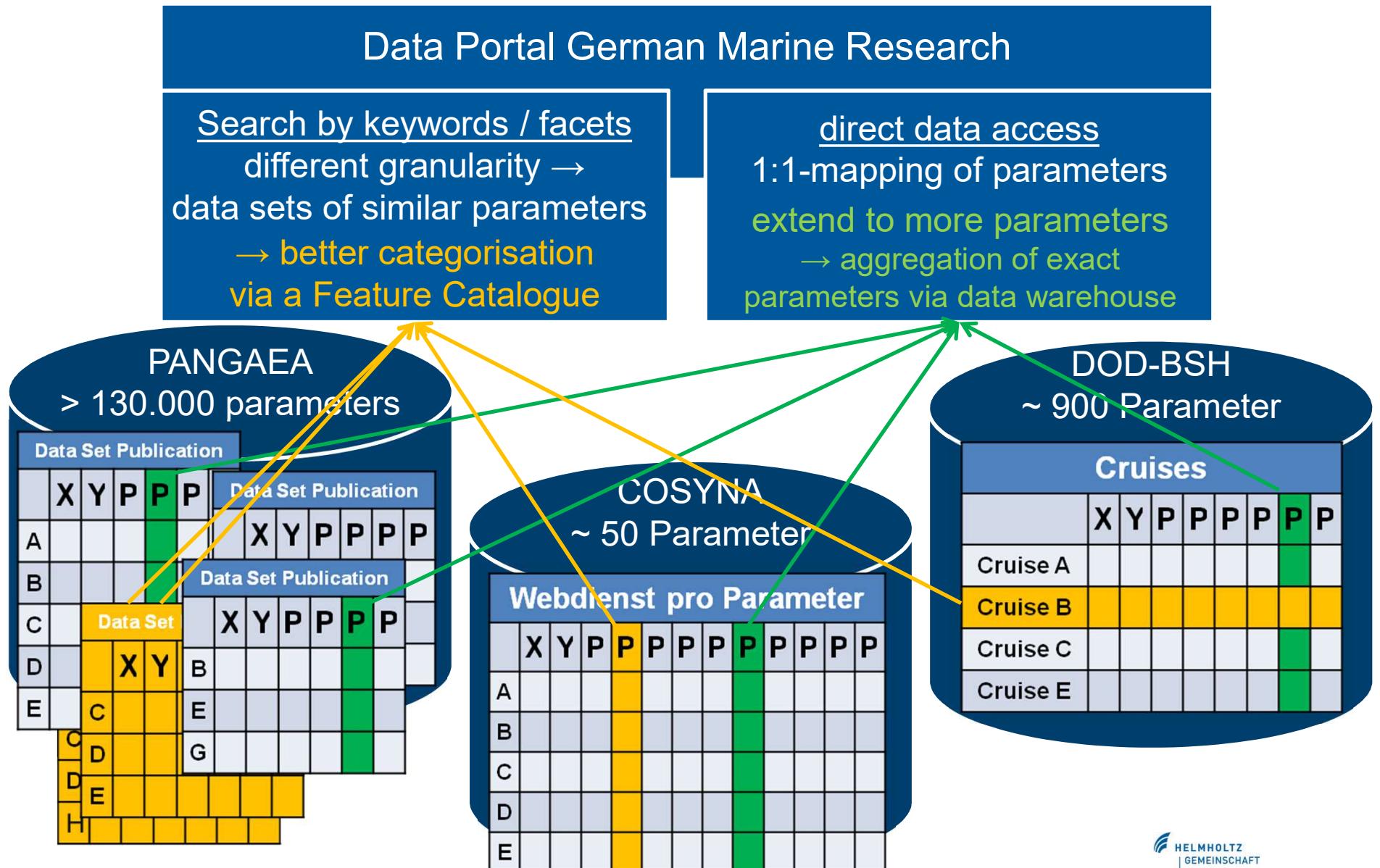
# Status quo – MaNIDA / Data Portal

- Less than 25% of data submission per ship's station of our research vessel data are available (big research vessels)  
→ not validated, not traceable, not in our repositories
- We have to work **continuously** on a common base for **harmonisation** and categorising
- We have to work on common **workflows** and defined **responsibilities** including **resources**.
- **Granularities** of data sets are different:
  1. supplement to publications
  2. by cruise
  3. single parameter
- We need common **guidelines / directives**.

# Perspectives – MaNIDA / Data Portal

- 1) Improvements of data portal and data providers
  - Harmonisation via internat. standards/vocabularies
  - **Reasonable** direct data access (→ aggregation, products)
- 2) Guidelines
  - for data providers (✓)
  - Joint policy / DM-concept AWI, GEOMAR, HZG (½✓ 02/2016)
- 3) Central “**Landstation**” (incl. ~data curation center) for national (middle-big) research vessels (draft proposal ✓)
  - Basic workflows **underway data** (coast calculation ✓)
  - DMP → ticketing → responsible staff
  - Ship's device server [http://www.dship-devices.de/web/search\\_device](http://www.dship-devices.de/web/search_device) (✓)
- 4) Permanent funding for basic operation (HGF/POF/ LK2 ???)

# Granularity, harmonisation and direct data access



Chlorophyll

Search

Bookmark your search

▼ Provider

PANGAEA (14906)

COSYNA (2143)

DOD (337)

EPIC (224)

OCEANREP (127)

more facets...

▼ Region

Atlantic Ocean (5021)

Pacific Ocean (4572)

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Southern Ocean (1526)

Mediterranean Region (1067)

more facets...

▼ Author

Krasemann, Hajo (2143)

IFREMER (1683)

Balch, William M (1603)

BODC (1317)

O'Reilly, J (1047)

more facets...

▼ Platform

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Nathaniel B. Palmer (716)

more facets...

▼ Expedition

D192 (399)

TT011 (359)

TT007 (304)

Historical\_Chile (301)

NBP97-08 (218)

more facets...

▼ Device

CTD/Rosette (6237)

Chlorophyll Case 2 Algorithmus  
(1118)

Chlorophyll SeaDAS Processing

## Search by keywords of meta data and abstracts via Lucene Elastic Search

Sort by best match date

▼ Geographic coverage



filter by map bounding box

▼ Temporal coverage

+ Begin 2014-11-21

+ End 2014-11-21

filter by temporal coverage

▼ Keywords

▼ Relationships

▼ Object overview

Expeditions

(no expeditions associated)

Platforms

Modis on Aqua or Terra

Provider

COSYNA

Pigments measured on water bottle samples at station TT043\_20-3 (2003)

Goericke, Ralf

doi:10.1594/PANGAEA.117899

tsv view object

Pigments measured on water bottle samples at station TT043\_21-20 (2003)

Goericke, Ralf

doi:10.1594/PANGAEA.117902

tsv view object

Pigments measured on water bottle samples at station TT043\_22-1 (2003)

Goericke, Ralf

doi:10.1594/PANGAEA.117907

tsv view object

Pigments measured on water bottle samples at station TT043\_26-16 (2003)

Goericke, Ralf

doi:10.1594/PANGAEA.117914

tsv view object

Pigments measured on water bottle samples at station TT043\_27-1 (2003)

Goericke, Ralf

## Direct Data Access Service

Direct Data Access allows you to request and download aggregated data from our data providers. Please note that we delete data files after 7 days.

Pay attention to data originators and cite!

Bookmark your request overview!

### Data request

Parameter

Provider

Format

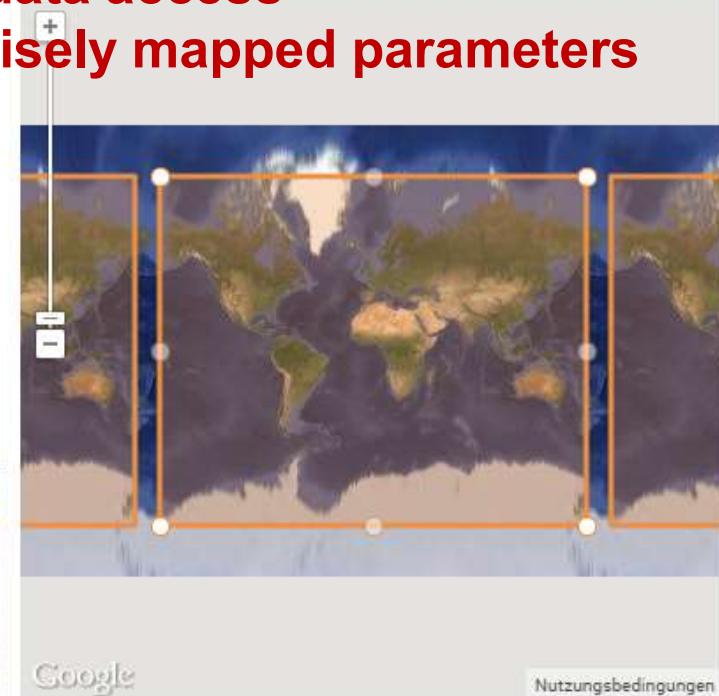
sea\_water\_temperature ▾  
COSYNA  
DOD  
PANGAEA

comma separated va ▾

### Constraints

	Begin	End
Date	2013-01-01	2013-02-01
Depth		
North	80	
East	170	
South	-80	
West	-170	

direct data access  
of precisely mapped parameters



Nutzungsbedingungen

### Your requests

Date	Parameter	Provider	Data points	Percent	Remaining Status
2014-10-27 10:18:45	sea_water_temperature	COSYNA, DOD, PANGAEA	353818		FINISHED

## Direct Data Access Service

Direct Data Access allows you to request and download aggregated data from our data providers. Please note that we delete data files after 7 days.

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Bookmark your request overview!

### Data request

Parameter

Provider

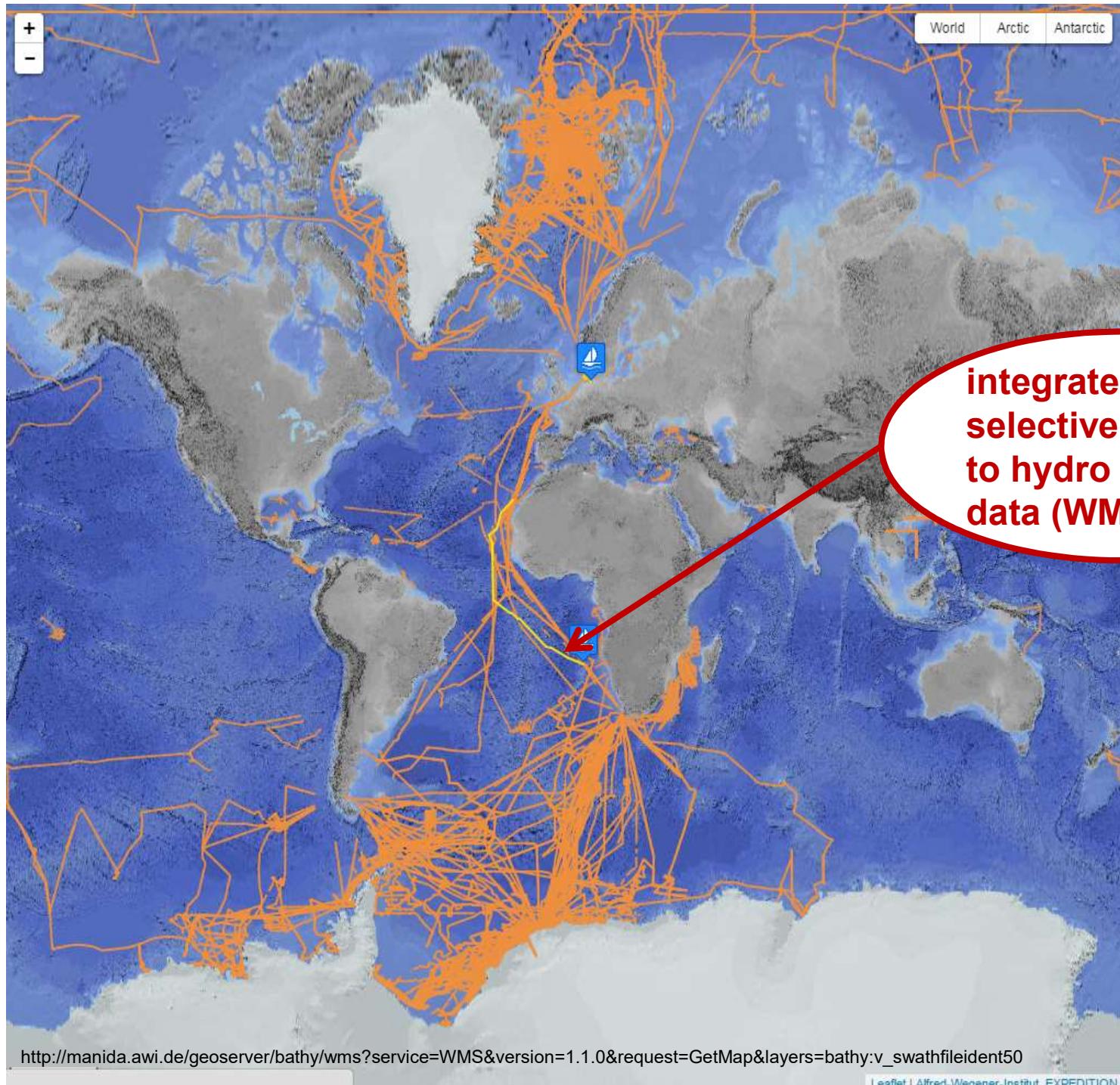
sea\_water\_temperature

COSYNA

**direct data access  
of precisely mapped parameters**

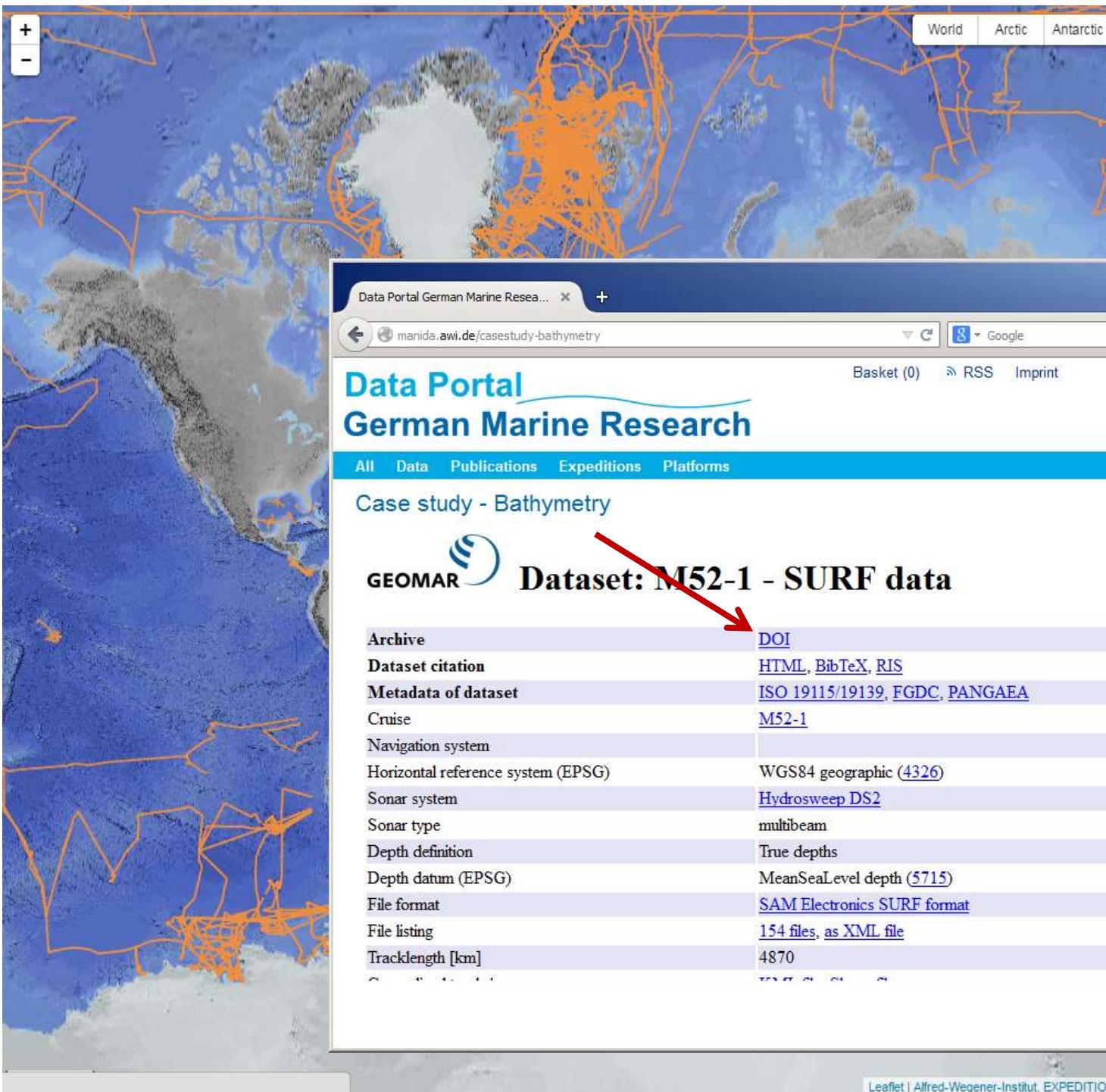
The screenshot shows a Microsoft Excel spreadsheet titled "065868b4-b8e5-4789-8b75-479c51fab007.csv - Microsoft Excel". The ribbon menu is visible at the top. The data is displayed in a table with columns labeled "datetimelatitudelongitudedepthvalueerrorqualitydevicevalue transformed?dataset". The first row contains column headers. Rows 2 through 14 show data entries, with the URL "http://doi.pangaea.de/10.1594/PANGAEA.53256" circled in red. The last row is a footer with the identifier "065868b4-b8e5-4789-8b75-479c51f". A large red circle highlights the provider dropdown menu in the "Data request" section of the interface above the Excel window.

datetimelatitudelongitudedepthvalueerrorqualitydevicevalue transformed?dataset
1994-08-02 00:35:00.00074.9985925.266635.00.034861104truehttp://doi.pangaea.de/10.1594/PANGAEA.53256
1994-08-02 00:35:00.00074.9985925.2666311.00.034832187truehttp://doi.pangaea.de/10.1594/PANGAEA.53256
1994-08-02 00:45:00.00075.0022495.3858385.00.034857008truehttp://doi.pangaea.de/10.1594/PANGAEA.53256
1994-08-02 00:45:00.00075.0022495.38583811.00.034828043truehttp://doi.pangaea.de/10.1594/PANGAEA.53256
1994-08-02 00:55:00.00075.0018785.4995015.00.034868422truehttp://doi.pangaea.de/10.1594/PANGAEA.53256
1994-08-04 00:00:00.00054.6512.457.95597.77899980545044AcceptableProfiler, unknownfalsehttp://seadata.bsh.de/Cgi-csr/retrieve_dod/viewReport.pl?csref=3948
1994-08-04 00:00:00.00054.6512.459.94487.90199995040894AcceptableProfiler, unknownfalsehttp://seadata.bsh.de/Cgi-csr/retrieve_dod/viewReport.pl?csref=3948
1994-08-04 00:00:00.00054.6512.4510.93937.85500001907349AcceptableProfiler, unknownfalsehttp://seadata.bsh.de/Cgi-csr/retrieve_dod/viewReport.pl?csref=3948
1994-08-04 00:00:00.00054.6512.4511.93377.875AcceptableProfiler, unknownfalsehttp://seadata.bsh.de/Cgi-csr/retrieve_dod/viewReport.pl?csref=3948
1994-08-04 00:00:00.00054.6512.4513.92269.59099960327148AcceptableProfiler, unknownfalsehttp://seadata.bsh.de/Cgi-csr/retrieve_dod/viewReport.pl?csref=3948
Bereit



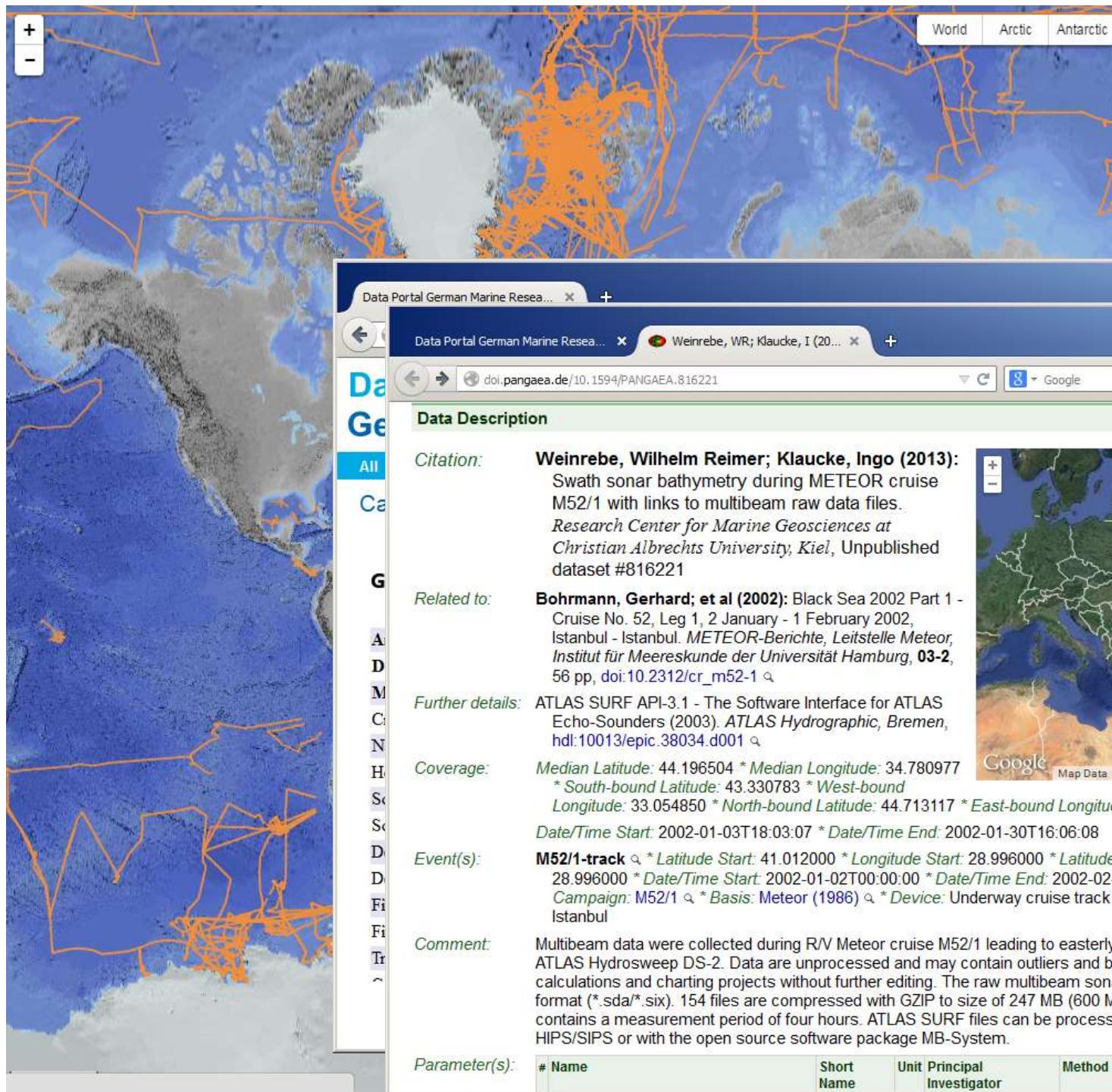
**Web service  
bathymetry  
in preparation**

integrated, visual  
selective access  
to hydro acoustic  
data (WMS, WFS)



Web service  
bathymetry  
in preparation

# Web service bathymetry in preparation



The image displays a world map with orange bathymetry survey tracks overlaid. In the foreground, a screenshot of a web browser window shows the 'Data Portal German Marine Research' website. The page title is 'Weinrebe, WR; Klaucke, I (2013)'. The 'Data Description' section includes a citation for 'Weinrebe, Wilhelm Reimer; Klaucke, Ingo (2013): Swath sonar bathymetry during METEOR cruise M52/1 with links to multibeam raw data files. Research Center for Marine Geosciences at Christian Albrechts University, Kiel, Unpublished dataset #816221'. It also lists related work by Bohrmann et al. (2002) and provides further details about the ATLAS SURF API. A map of Europe highlights the Black Sea area. A download dialog box titled 'Öffnen von M52\_1\_bathymetry-datalinks.tab' is open, asking if the user wants to open the file 'M52\_1\_bathymetry-datalinks.tab' (TAB-Datei from http://doi.pangaea.de). The 'Datei speichern' (Save) option is selected. A red arrow points to the 'Datei speichern' button.

World Arctic Antarctic

Data Portal German Marine Resea... Weinrebe, WR; Klaucke, I (2013)

Citation: Weinrebe, Wilhelm Reimer; Klaucke, Ingo (2013): Swath sonar bathymetry during METEOR cruise M52/1 with links to multibeam raw data files. Research Center for Marine Geosciences at Christian Albrechts University, Kiel, Unpublished dataset #816221

Related to: Bohrmann, Gerhard; et al (2002): Black Sea 2002 Part 1 - Cruise No. 52, Leg 1, 2 January - 1 February 2002, Istanbul - Istanbul. METEOR-Berichte, Leitstelle Meteor, Institut für Meereskunde der Universität Hamburg, 03-2, 56 pp, doi:10.2312/cr\_m52-1

Further details: ATLAS SURF API-3.1 - The Software Interface for Echo-Sounders (2003). ATLAS Hydrography, doi:10.1013/epic.38034.d001

Coverage: Median Latitude: 44.196504 \* Median Longitude: 28.996000 \* South-bound Latitude: 43.330783 \* West-bound Longitude: 33.054850 \* North-bound Latitude: 45.000000 \* East-bound Longitude: 29.000000

Date/Time Start: 2002-01-03T18:03:07 \* Duration: 00:00:00

Event(s): M52/1-track \* Latitude Start: 41.012000 \* Longitude Start: 28.996000 \* Date/Time Start: 2002-01-02T18:03:07 \* Duration: 00:00:00 \* Campaign: M52/1 \* Basis: Meteor (1986-2013) \* Location: Istanbul

Comment: Multibeam data were collected during R/V Meteor cruise M52/1 using the ATLAS Hydrosweep DS-2. Data are unprocessed and intended for calculations and charting projects without further processing. The data are in the SRTM format (\*.sda/\*.six). 154 files are compressed into one archive. The measurement period of four hours was recorded with the HIPS/SIPS or with the open-source software.

Parameter(s): # Name

Download

Öffnen von M52\_1\_bathymetry-datalinks.tab

Sie möchten folgende Datei öffnen:

M52\_1\_bathymetry-datalinks.tab  
Vom Typ: TAB-Datei  
Von: http://doi.pangaea.de

Wie soll Firefox mit dieser Datei verfahren?

Öffnen mit Editor  
 Datei speichern

Für Dateien dieses Typs immer diese Aktion ausführen

OK Abbrechen

# Perspectives – central “*Landstation*”



- Searchability and access of **complete, quality assured** and **published** primary data and data products
- Linking of data and scientific publications
- Visibility and citability of data and scientific results
- International networking of national contributions
- Validated information on expeditions
- Transparency of the use of funds for evaluation
- Enhanced planning of research projects and expeditions

Data Portal German Marine Research + manida.awi.de/search Basket (0) RSS Imprint

This portal is a beta.  
Please give us feedback.

# Data Portal German Marine Research

All Data Publications Expeditions Platforms More services About Feedback

chlorophyll Search Bookmark your search

Provider: No facets selected.

PANGAEA (436)  
DOD (73)  
OCEANREP (14)  
EPIC (13)  
HZG (2)

Region:

Author:

Platform:  
Meteor (1986) (100)  
Polarstern (76)  
Poseidon (37)  
Henryk Arctowski Polish Ant. Station (25)  
Steaua de Mare I (23)  
more facets...

Expedition:

Device:  
CTD/Rosette (132)  
MultiCorer (100)  
plankton nets (48)  
sieves and filters (38)  
Fluoroprobe (37)  
more facets...

Parameter:

Project:

Dissemination:

Access:  
open access (368)  
access rights needed (89)

Media type:

File type:  
tsv (424)  
zip (18)  
pdf (15)

Chlorophyll at fluoroprobe station AL221/1\_491-FLP31 (2009)  
Mengedoht, Dirk  
doi:10.1594/PANGAEA.712167  
[tsv](#) [view object](#)

Chlorophyll at fluoroprobe station AL221/1\_500-FLP40 (2009)  
Mengedoht, Dirk  
doi:10.1594/PANGAEA.712174  
[tsv](#) [view object](#)

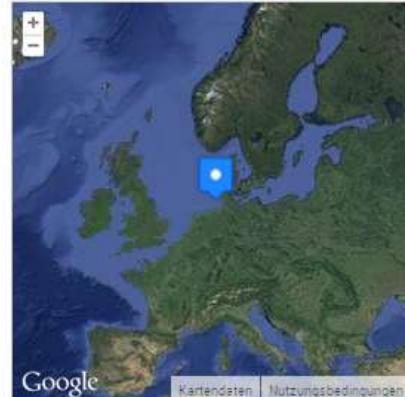
Chlorophyll at fluoroprobe station AL221/1\_517-FLP56 (2009)  
Mengedoht, Dirk  
doi:10.1594/PANGAEA.712171  
[tsv](#) [view object](#)

Chlorophyll at fluoroprobe station PO324\_12-FLP14 (2009)  
Mengedoht, Dirk  
doi:10.1594/PANGAEA.712198  
[tsv](#) [view object](#)

Chlorophyll at fluoroprobe station PO324\_21-FLP60 (2009)  
Mengedoht, Dirk  
doi:10.1594/PANGAEA.712201  
[tsv](#) [view object](#)

Hydrochemistry and pigments measured on water bottle samples at Cardoza Cove in 2007 (2010)  
Wasilowska, Agnieszka; Rzepecki, Marek  
doi:10.1594/PANGAEA.740082  
[tsv](#) [view object](#)

Hydrochemistry and pigments measured on water bottle samples at Monsimet Cove in 2007 (2010)  
Wasilowska, Agnieszka; Rzepecki, Marek  
doi:10.1594/PANGAEA.740087  
[tsv](#) [view object](#)

Geographic coverage:  Google Kartendaten Nutzungsbedingungen  filter by map bounding box

Temporal coverage: Begin 2009-02-01 End 2010-12-31  filter by temporal coverage

Keywords:

Relationships:

Object overview:  
Expeditions:  
AL221/1  
Platforms:  
Alkor  
Provider:  
PANGAEA

**...please use the data portal and leave us some feedback**

**Thank you**