



***Die Bedeutung von RDA für das  
"Datenportal für die Deutsche  
Meeresforschung" (MaNIDA)***

**RDA Deutschland Treffen, November 2014**

Hans Pfeiffenberger, Alfred Wegener Institut

**research data sharing without barriers**

**[rd-alliance.org](http://rd-alliance.org)**

# Überblick



- Zentrale Suche und Zugriff auf **Daten** und **Publikationen** der deutschen Meeresforschung
- Fokus: 11 mittlere und große Forschungsschiffe
- Helmholtz Anschubfinanzierung 2011 – 2014
- Aktuell 8 Datenanbieter



BUNDESAMT FÜR  
SEESCHIFFFAHRT  
UND  
HYDROGRAPHIE



- **„Wo sind die Daten?“** –  
Senatskommission Ozeanographie der DFG (und auch sonst Alle)
- **„Wo sind *meine* Daten?“** –  
Alle, die sich die Mühe gemacht haben, Daten zu publizieren
- **„Gebt mir ein aggregiertes Datenprodukt von allen Messungen des Parameters X“**  
Modellierer

# TALES

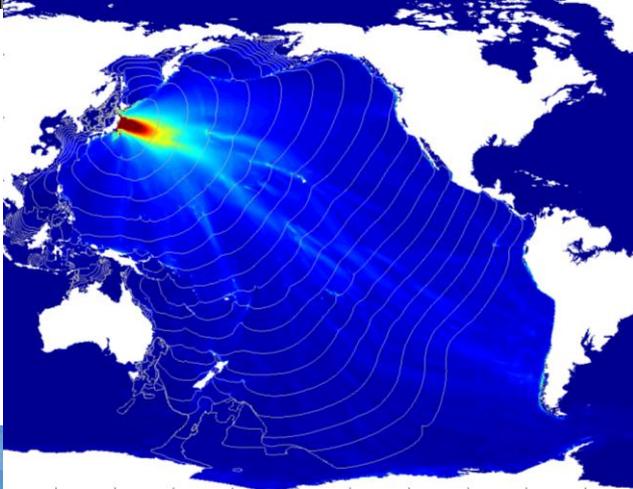
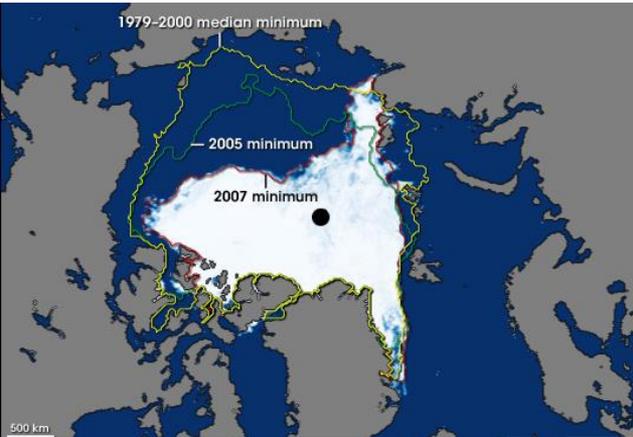


“[Researchers would prefer] just one point of access to all data, which would be simple to use and ‘fool proof’.”

But she suspects it is wishful thinking to ask for Google-like simplicity when one looks for “chlorophyll data in the Atlantic at 200 meters depth”

Karin Lochte  
(Alfred Wegener Institute for Polar and Marine Research)

# MaNIDA – Enabling Data-Intensive Marine Science



## Global Change

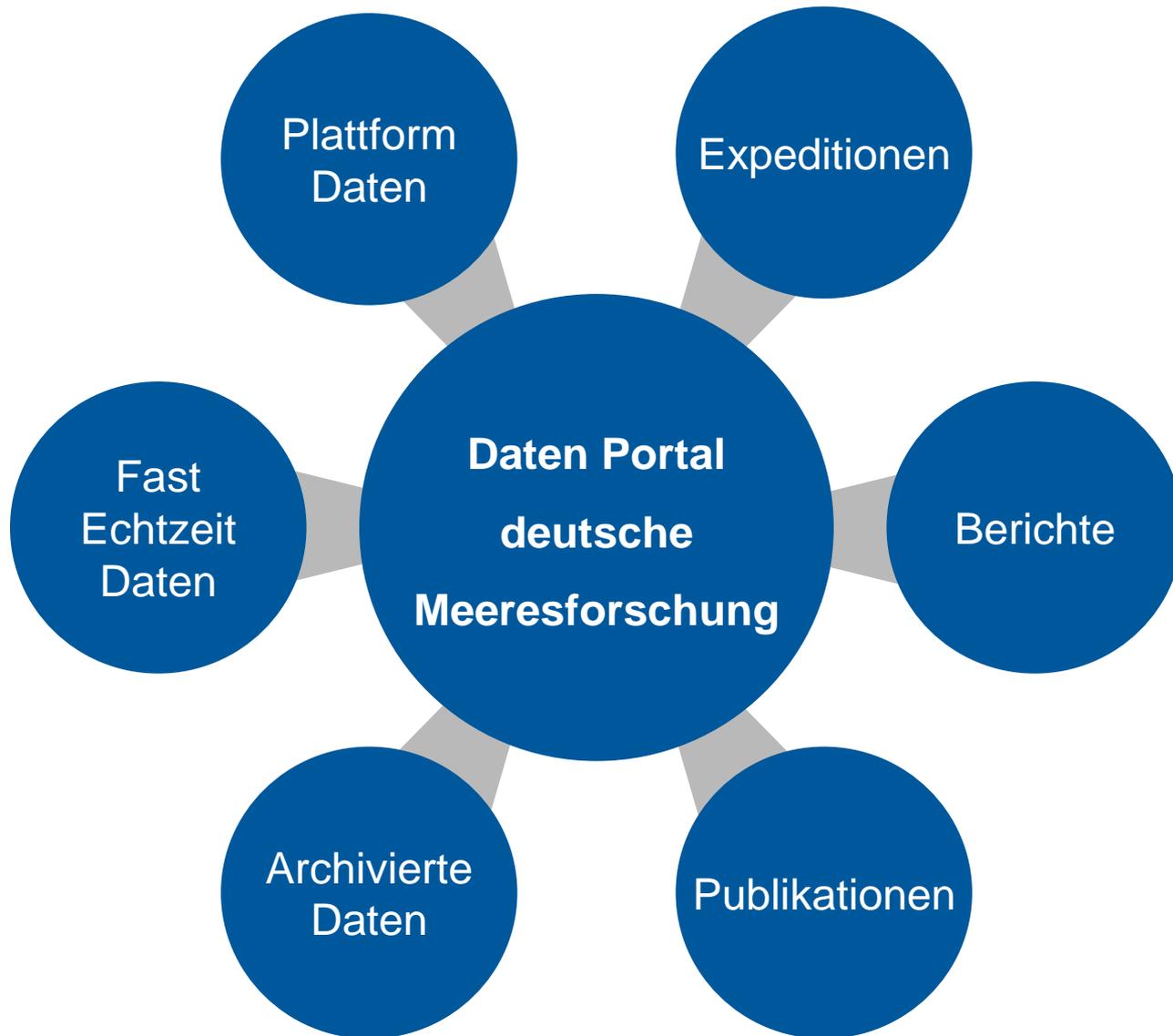
- Assessing, understanding, and predicting environmental changes
- Human environmental impact

## Hazards

- Risk analysis and support for disaster management
- Understanding environmental factors affecting human health

## Resources

- Sustainable ecosystem management
- Energy from the ocean



Search

Bookmark your search

## Facetten, z.B.

- Region
- Expedition
- Gerät
- Parameter
- Autor / Forscher

- ▼ 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

## Geographic coverage



filter by map bounding box

## Temporal coverage

Begin

End

filter by temporal coverage

## Keywords



Search

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.	Events   Data   Map   Publications
Polarstern	PS93	ARK-XXIX/2; BSH20150012	2015-06-30 - Tromsø	2015-08-14 - Tromsø	Soltwedel, T.	Events   Data   Map   Publications
Polarstern	PS92	ARK-XXIX/1; BSH20150011	2015-05-19 - Bremerhaven	2015-06-28 - Tromsø	Peeken, I.	Events   Data   Map   Publications
Polarstern	PS91	ANT-XXX/4; BSH20150010	2015-03-18 - Punta Arenas	2015-04-19 - Bremerhaven	Knust, R.	Events   Data   Map   Publications

## Harmonisierung und eindeutige Identifikation von

- Expeditionen
- Geräten
- Parametern
- ...

- ▼ 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)

## Expedition

Expedition	ANT-XXIX/2
Alias	PS81, BSH20120321
Begin	2012-11-30 - Cape Town
End	2013-01-18 - Punta Arenas
Platforms	Polarstern
Coordinator	Knust, R.
Chief scientists	Boebel, O.
Region	Atlantic Sector of Southern Ocean

### Planned research

Physical Oceanography, geophysics, HAFOS, SWEAP

### Research description

(no description available)

### Events

### Reports

### Archived data

Radiosonde PS81/34126 during POLARSTERN cruise ANT-XXIX/2 on 2012-12-02 11:06h (2013)  
König-Langlo, Gert

Radiosonde PS81/34127 during POLARSTERN cruise ANT-XXIX/2 on 2012-12-03 11:04h (2013)  
König-Langlo, Gert

Radiosonde PS81/34129 during POLARSTERN cruise ANT-XXIX/2 on 2012-12-05 11:10h (2013)  
König-Langlo, Gert

Radiosonde PS81/34131 during POLARSTERN cruise ANT-XXIX/2 on 2012-12-07 11:02h (2013)  
König-Langlo, Gert

Radiosonde PS81/34133 during POLARSTERN cruise ANT-XXIX/2 on 2012-12-10 11:09h (2013)  
König-Langlo, Gert

[search for more...](#)

### Publications

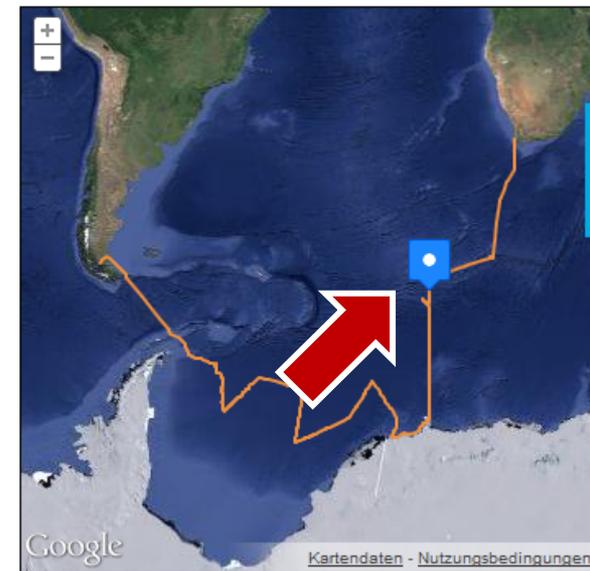
Article



[download trackline as kml](#) | [zoom to trackline](#)

# Events bzw. Stationen

PS81/0032-2	2012-12-08 10:25:00	0,00233	-55,49900	2012-12-08 11:05:00	0,00267	-55,49967	Calibration
PS81/0032-3	2012-12-08 11:42:00	0,00100	-55,49983	2012-12-08 12:16:00	0,00117	-55,50017	Calibration
PS81/0032-4	2012-12-08 12:39:00	0,00183	-55,49933	2012-12-08 13:16:00	0,00133	-55,49917	Calibration
PS81/0032-5	2012-12-08 13:38:00	0,00500	-55,49883	2012-12-08 14:16:00	0,00567	-55,49583	Calibration
PS81/0032-6	2012-12-08 14:33:00	0,00683	-55,49467				Argo float
PS81/0033-1	2012-12-08 19:12:00	0,00733	-56,00000				CTD/Rosette
PS81/0034-1	2012-12-08 23:23:00	0,00017	-56,49717				Argo float
PS81/0035-1	2012-12-09 04:13:00	0,00083	-57,00033				CTD/Rosette
PS81/0036-1	2012-12-09 04:00	0,00100	-57,50100				Argo float
PS81/0037-1	2012-12-09 15:00:00	-0,00433	-58,00250				CTD/Rosette
PS81/0038-1	2012-12-11 01:40:00	0,00133	-58,49733				Argo float
PS81/0039-1	2012-12-11 06:25:00	0,10617	-59,05683				Mooring
PS81/0039-2	2012-12-11 10:40:00	0,11300	-59,05150				CTD/Rosette
PS81/0039-3	2012-12-11 14:41:00	0,08267	-59,04300				Mooring
PS81/0040-1	2012-12-11 18:17:00	-0,00017	-59,50217				Argo float
PS81/0041-1	2012-12-11 23:11:00	0,00117	-60,00050				CTD/Rosette
PS81/0042-1	2012-12-12 04:08:00	0,00067	-60,50000				Argo float
PS81/0043-1	2012-12-12 09:28:00	-0,01450	-60,99850				CTD/Rosette



[download trackline as kml](#) | [zoom to trackline](#)

Search

Bookmark your search

- Provider
  - PANGAEA (1)
- Dissemination
  - download (1)
- Access
  - open access (1)
- Media type
  - text (1)
- File type
  - tsv (1)
- Region
  - Atlantic Ocean (1)
  - Southern Ocean (1)
- Author
  - Rohardt, Gerd (1)
- Platform
  - Polarstern (1)
- Expedition
  - ANT-XXIX/2 (1)
- Device
  - CTD/Rosette (1)
- Parameter
  - Attenuation, optical beam transmission (1)
  - Conductivity (1)
  - Density, sigma-theta (0) (1)
  - Fluorometer (i)

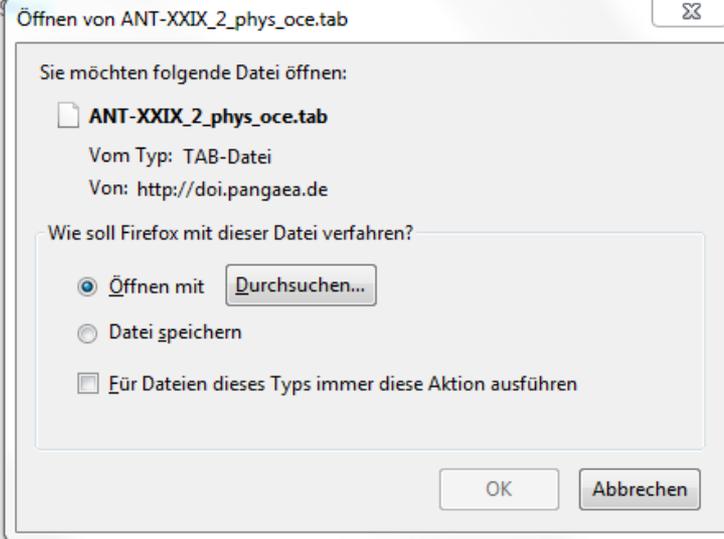
All Archived data Publications Reports Near real time Sort by best match date

Selected facets: ANT-XXIX/2 | PS81/0035-1

Physical oceanography during POLARSTERN cruise ANT-XXIX/2 (2013) +  
Rohardt, Gerd  
doi:10.1594/PANGAEA.817255  
tsv view object

1 objects for 11

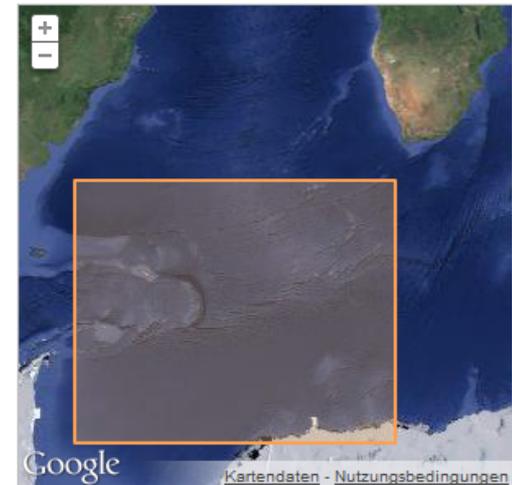
first page | 1 | last page



Keywords

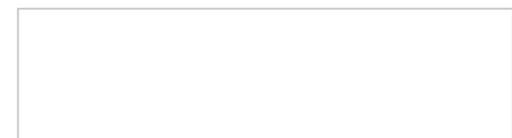
oceanography  
ant  
cruise  
physical

Geographic coverage



filter by map bounding box

Relationships



Feedback

### 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

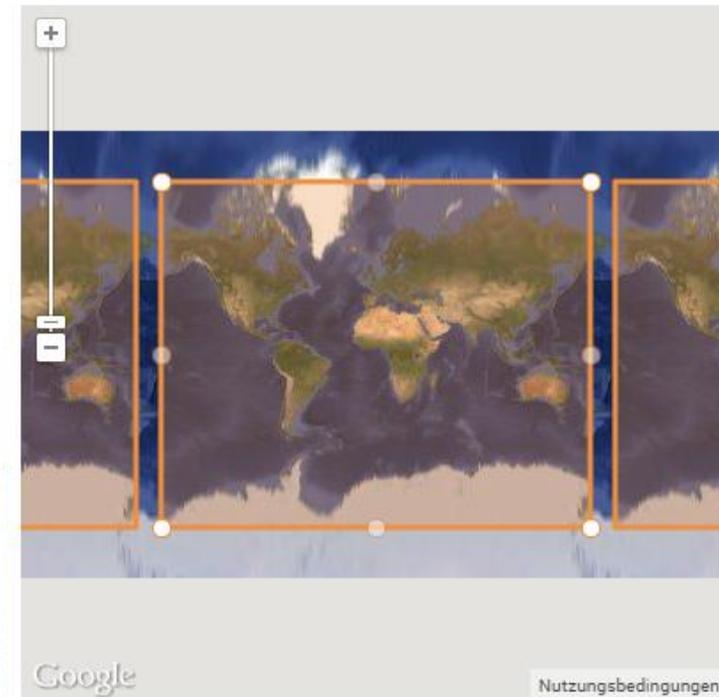
Parameter

Provider

Format

#### Constraints

	Begin	End
Date	<input type="text" value="2013-01-01"/>	<input type="text" value="2013-02-01"/>
Depth	<input type="text"/>	<input type="text"/>
North	<input type="text" value="80"/>	
East	<input type="text" value="170"/>	
South	<input type="text" value="-80"/>	
West	<input type="text" value="-170"/>	



#### Your requests

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

# MaNIDA Arbeitsgruppen



- **Portal** – Architektur, **Schnittstellen, Standards**
- **Katalog** – Expeditions**metadaten**, Berichte
- **Underway Daten** – DShip, Geräte, **Cruise Summary Reports**
- **Hydroakustik** – Fallstudie Bathymetrie
- **Harmonisierung**, Vokabularien, Qualität, Standards und Aggregation von Daten
- **Monitoring** und **Near real-time Daten**
- **Data Curation Center** – Landstation
- **Policies** und Charta

# Nationale Lösungen?



- Standardisierungen, Harmonisierungen und Abstimmungen wären **auf rein nationaler Ebene SINNLOS**
- „Deutsche Daten“ wären international nicht sichtbar  
=> **geringerer Impact deutscher Forschung**
- Europäische, globale Daten wären in nationalem Portal nicht sichtbar  
=> **keine Arbeitsgrundlage für dt. Forscher**

# MaNIDA und RDA

- **RDA ist die ideale Plattform für die internationale Vernetzung von Dateninfrastrukturen**
  - im Detail: die WGs
  - zur Vernetzung: IGs (z.B. RDA/WDS-CODATA)
- **Für MaNIDA:**
  - RDA IG Marine Data (=> ODIP – EU, US, AUS)
  - RDA WG Data Citation (NRT, Aggregierte Daten)
  - ...
  - RDA IG Biodiversity Data Integration
  - RDA IG Geospatial
  - RDA IG PID
  - RDA IG Publishing Data

# Bonus: A Real Conversation

- X (EU): so far you focus on metadata only?
- Y (AUS): yes, but actually this can give data as well through the clients.
- X : what is your definition of collections? How the aggregation is done?
- Y: certain type of data, Argo is a collection, SOOP is a collection. There are about 60 collections
- X : CDI has about 450 at present.