



***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

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

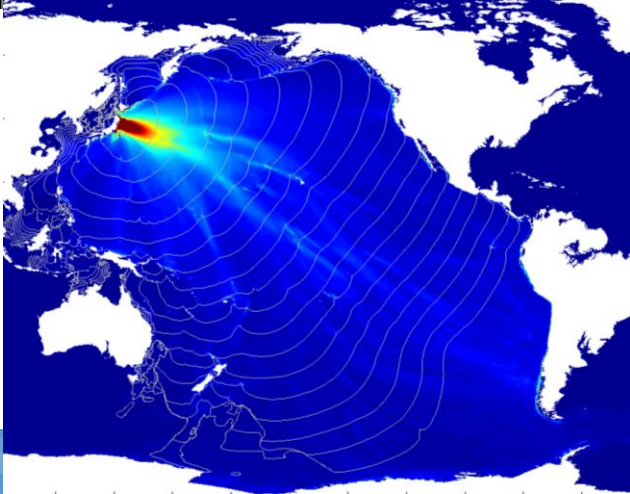
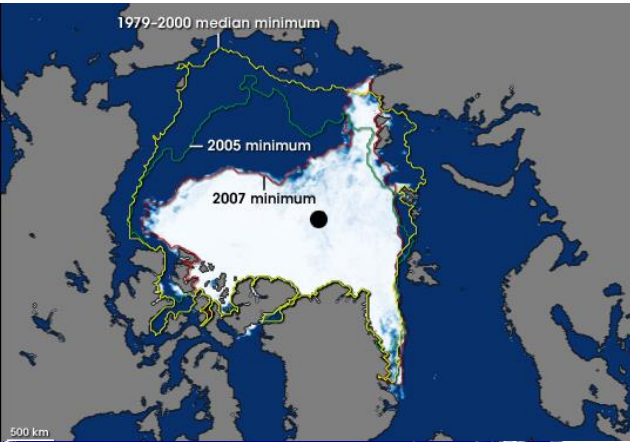


“[Researchers would prefer] just one point of access to all data, which would be simple to use and ‘fool proof’.”

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

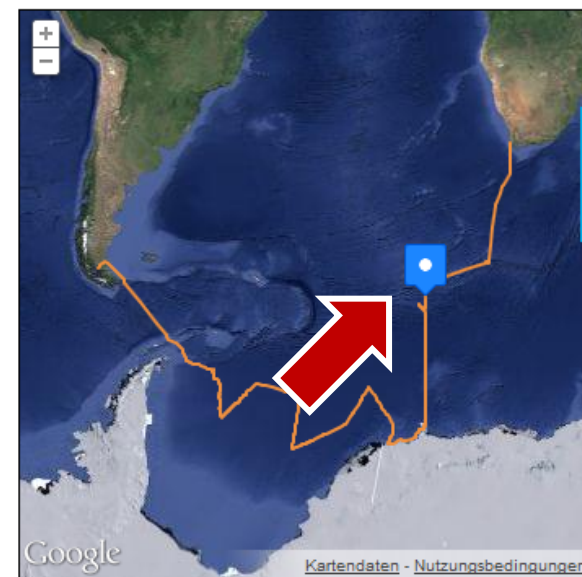
Article



[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



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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

Öffnen von ANT-XXIX_2_phys_oce.tab

Sie möchten folgende Datei öffnen:

- ANT-XXIX_2_phys_oce.tab
Vom Typ: TAB-Datei
Von: http://doi.pangaea.de

Wie soll Firefox mit dieser Datei verfahren?

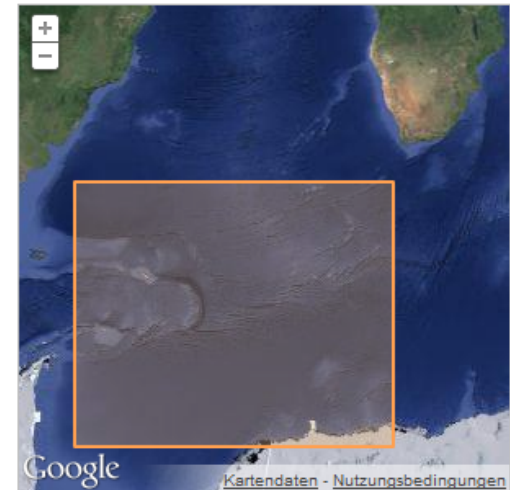
- Öffnen mit
- Datei speichern
- Für Dateien dieses Typs immer diese Aktion ausführen

OK Abbrechen

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

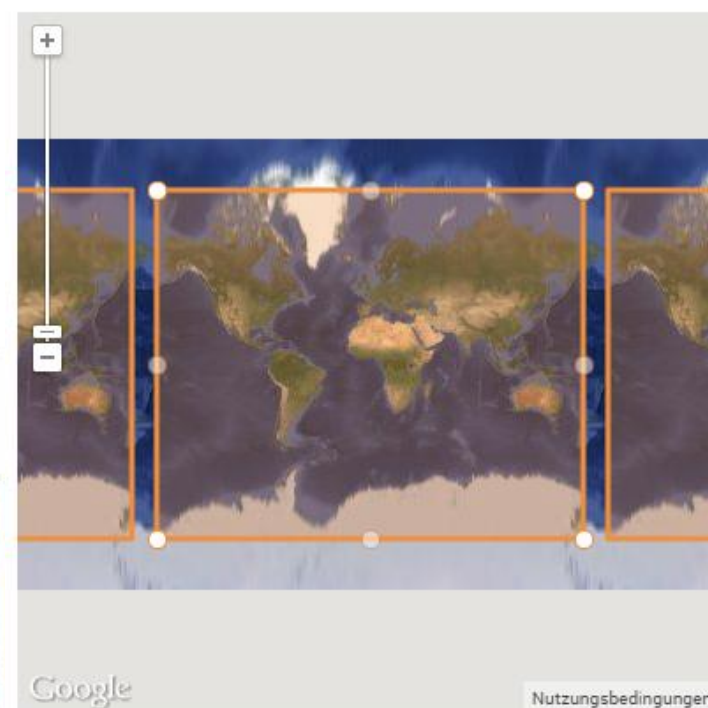
Parameter

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.