

KÜNO WORKSHOP 'DATA SHARING IN MARINE RESEARCH'

Karen Albers (AWI)
Linda Baldewein (Hereon)
Robin Hess (AWI)
Flavia Höring (MARUM)
Hela Mehrtens (GEOMAR)
Marie Ryan (Hereon)
Franziska Schmacka (IOW)
Gauvain Wiemer (DAM)

AGENDA

DAM

Time	Topic	Speaker
1:00	Introduction of the DAM core area 'Data management & Digitalization'	Gauvain Wiemer (DAM)
1:20	The basics and benefits of research data management	
	Principles of research data management	Marie Ryan (Hereon)
	Deepening talks in breakout rooms (participants can choose between rooms) Room 1: Data management workflows for campaigns and model data Room 2: Data management workflows for experiment and model data	Linda Baldewein (Hereon) Hela Mehrtens (GEOMAR)
	Data publishing with PANGAEA	Flavia Höring (MARUM)
2:45	<i>Coffee break</i>	
3:00	Find and access (interoperable) marine data for re-use with the Data Portal German Marine Research	Robin Hess (AWI) & Karen Albers (AWI)
	Introduction and live demonstration	
	Hands-on exercises in breakout groups (participants are automatically assigned to groups)	
	Evaluation and Discussion	
3:55	Wrap-up and Feedback	Gauvain Wiemer (DAM)

1. DAM-A SHORT INTRODUCTION

DAM

Who we are

- ~ **AWI** – Alfred-Wegener-Institut Helmholtz-Zentrum für Polar- und Meeresforschung
 - ~ **BAW** – Bundesanstalt für Wasserbau*
 - ~ **BSH** – Bundesamt für Seeschiffahrt und Hydrographie*
 - ~ **BGR** – Bundesanstalt für Geowissenschaften und Rohstoffe*
 - ~ **CEN** – Centrum für Erdsystemforschung und Nachhaltigkeit, Universität Hamburg
 - ~ **DMM** – Deutsches Meeresmuseum Stralsund*
 - ~ **DSM** – Deutsches Schifffahrtsmuseum – Leibniz-Institut für Maritime Geschichte*
 - ~ **FRAUNHOFER** – Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.
 - ~ **FZK** – Forschungszentrum Küste der Leibniz Universität Hannover und der Technischen Universität Braunschweig
 - ~ **GEOMAR** Helmholtz-Zentrum für Ozeanforschung Kiel
 - ~ **HEREON** – Helmholtz-Zentrum Hereon
 - ~ **ICBM** – Institut für Chemie und Biologie des Meeres an der Carl von Ossietzky Universität Oldenburg
 - ~ **IOW** – Leibniz-Institut für Ostseeforschung Warnemünde
 - ~ **KMS** – Kiel Marine Science an der Christian-Albrechts-Universität zu Kiel
 - ~ **MARUM** – Zentrum für Marine Umweltwissenschaften der Universität Bremen
 - ~ **MPI-M** – Max-Planck-Institut für Meteorologie
 - ~ **MPI-MM** – Max-Planck-Institut für Marine Mikrobiologie
 - ~ **MTS** – Department Maritime Systeme, Universität Rostock
 - ~ **SNG** – Senckenberg am Meer, Senckenberg Gesellschaft für Naturforschung
 - ~ **THÜNEN** – Johann Heinrich von Thünen-Institut, Bundesforschungs-institut für Ländliche Räume, Wald und Fischerei
 - ~ **UG** – Universität Greifswald
 - ~ **ZMT** – Leibniz-Zentrum für Marine Tropenforschung
 - ~ **DIE** – Deutsches Institut für Entwicklungspolitik
 - ~ **IASS** – Institut für transformative Nachhaltigkeitsforschung
- * assoziierte Mitglieder



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What is ist about

The DAM is the chance of German marine research to realise its societal responsibility and to contribute to answering politically relevant scientific questions.



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The tasks of the DAM

- Addressing future questions of marine research at the highest scientific level with an overarching approach
- Contribute to research on global climate change
- **Providing action knowledge for decisions in politics, business and civil society**
- To further expand the leading international position of German marine research
- To **increase the strategic capacity for action of Germany's marine science community** through common goals, activities and improved framework conditions
- To create a platform for the coordination and strategic development of German marine research
- Complement existing structures of the science system by
 - ...creating an overarching network of universities and research institutions
 - ...focusing on the effective transfer of research results
-

content
strategic
structural

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The tasks of the DAM

MARE:N and DAM

Coalition agreement: "We want to **strengthen coastal, polar and marine research** and expand research funding. We want to further develop the MARE:N marine research program and **establish a German Alliance for Marine Research** together with the federal states."



DAM serves the implementation of MARE:N

Additional funds are provided for this purpose
(ca. 60 Mill. € from 2019 to 2022)



https://www.bmbf.de/upload_filestore/pub/MARE_N.pdf

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The Core areas of the DAM

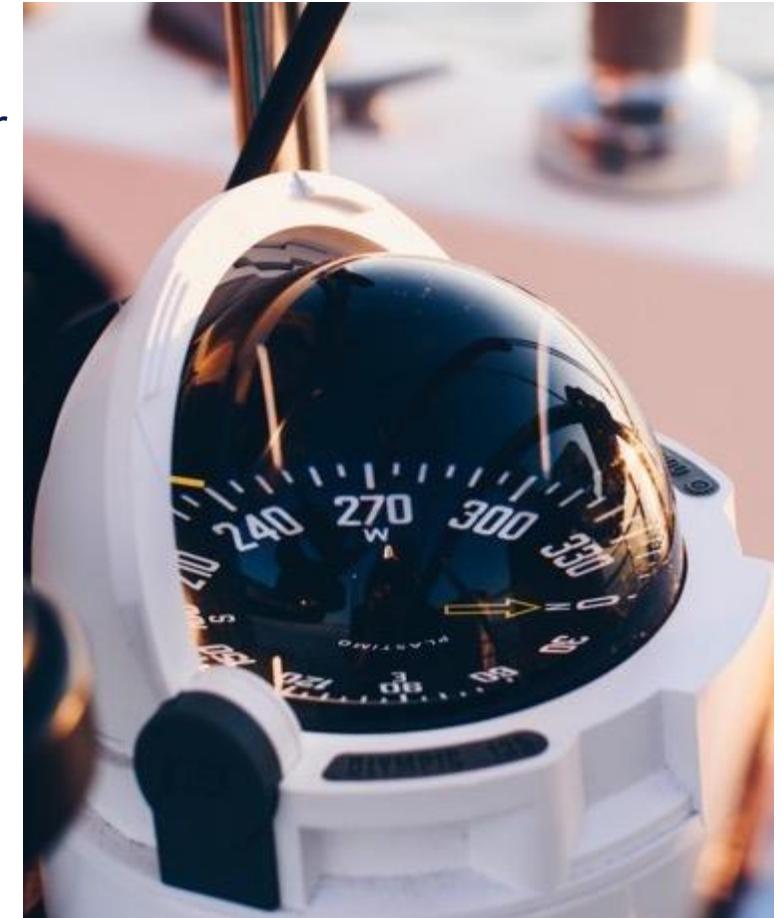


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The tasks within the DAM core area Data Management and Digitalization

- Member institutions develop a data management concept for the research landscape supported by the DAM-office
- Coordination for **FAIR and Open data access**
- Standards for **easier use and access to decentralized data**
- Consolidation of existing repositories and services
- Strengthen the connection to inter/national platforms
- Improved systematic data collection and analysis for ship expeditions and observatories
- Development of guidelines and standards
- **Development and implementation of a data portal**



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The pilot project “Underway”-Data within the DAM core area Data Management and Digitalization



Goal: Semi-automatic provision of quality-controlled “underway” data according to FAIR and Open principles.

Institutions: AWI, BSH, GEOMAR, Hereon, ICBM, IOW, KMS, MARUM, MPI-C

Data products

- locale flow velocity (ADCP)
- conductivity, temperature, depth (CTD)
- topography of the seabed (multibeam)
- T, S, turbidity, chlorophyll (sea water system)
- T, S, turbidity, oxygen, pH, pCO₂ (Ferrybox)

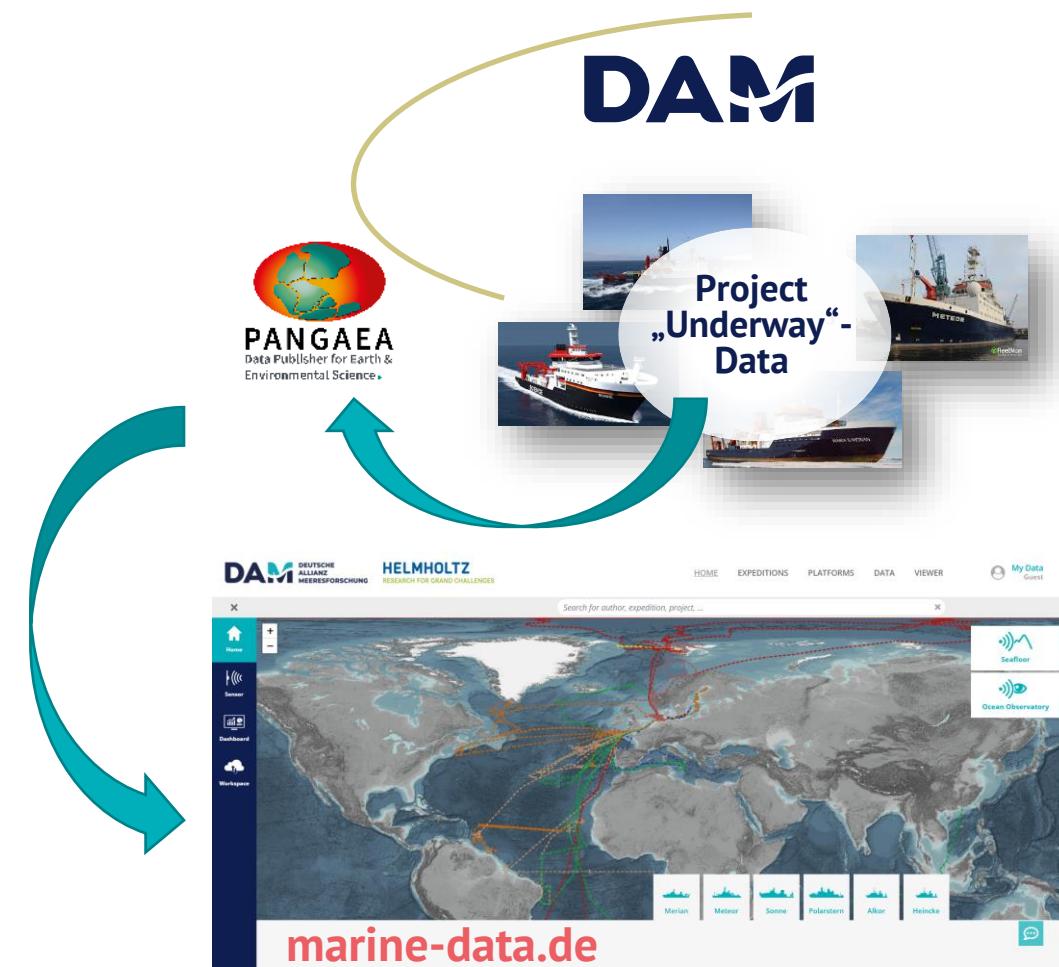
What has been reached?

- Establishment of a data flow from board to land
- systematic quality control and publication of data
- **Renewal of the „Data Portal German Marine Research“ (marine-data.de)**
- Connection to international portals

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DANKE

Wir freuen uns auf die Zusammenarbeit

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