§ Seminars and User Workshops

Every three months we offer a seminar on O2A components and services as well as other topics relevant to research data management.

Unless otherwise communicated, the seminar takes place **every three months on the first Wednesday of the month., 9:00-10:30 AM.**

The seminars take place online and can be reached via the following link: https://awi.webex.com/awi/j.php?MTID=m188c33b30d187648f76f101111102b6f

This is intended as an offer for you, however, as we are not always able to oversee which topics are of particular interest to you or which services still require explanation or an introduction, we need your support. Please feel free to contact us with any suggestion or comments you may have.

We will then try to incorporate these as best as possible.

- Bearbeiten

Training Units

	DATE	TOPIC	PROVISIONAL AGENDA	RESPONSIBLE	RELATED ITEMS
1	**2024**				
2	04.12.2024				
3	04.09.2024				
4	05.06.2024	Data tables cleaning: checklist in R	This hands-on session aims to present an R script prepared by PANGAEA editors. It's designed to help dataset creators to check and resolve some common problems and issues with data tables, before submitting them to a data repository like PANGAEA. Furthermore, the script has also a more generic usage to help you with your data for example by finding typos or "copy and paste"-errors. This step-by-step procedure will be presented in R and is suitable for users with basic knowledge of R/RStudio. If you are interested in a Python version, please visit the PANGAEA Community Workshop.	Daniela Ransby	
5	06.03.2024	REGISTRY -- teasering O2A's metadata backbone	O2A's metadata management tool has been completely restructured, revised and expanded. With a new design and many new functions, it has also been rebranded. sensor.awi.de becomes REGISTRY. With this click-thru we want to show the basic operating concepts of the UI and the most important changes and features.	Norbert Anselm	
6	**2023**				
7	20.12.2023	Christmas break			
8	29.11.2023	User-Customizable Map Viewers	The Marine Data Portal provides map-based viewers for visual data exploration on the web. In addition to pre-curated viewers used to present selected research topics, data products, campaigns or projects, logged-in users can create their own custom viewers and publish them. In this seminar you will receive an introduction to the comprehensive functions of the viewer. You will be shown how you can use these and create simple data compilations to share them with your colleagues.	Robin Heß	• Portal Confluence Page • Marine Data Portal • Earth Data Portal
9	25.10.2023	Research SW Policy	1. Research SW Policy at AWI - overview 2. Research Software Publication - Licenses and Citation Abstract: The new guidelines for research software at the AWI will be presented in the seminar. It is intended to increase awareness of research software as a tool, but also as an output of scientific work. Best practices should be established to ensure the quality of research software. This also includes the publication and citation of software. The survey conducted at AWI on research software made it clear that there is often a lack of clarity regarding licenses. Therefore, in the second part of the seminar, Tobias Schlauch from DLR will give an introduction to software publishing and licenses.	Bernadette Fritzsch	

10	04.10.2023	Introduction to ANVIO	Cheaper, higher-quality sequencing technologies have made 'omics analyses – metagenomics, pangenomics, phylogenomics, and more – central to investigations of microbial ecology and evolution. Anvi'o is a community-driven software platform enabling integrated analyses and interactive visualization of these multi-'omic data. It offers a versatile set of programs for working with sequence data that researchers can mix and match according to their research questions. While this can present a steeper learning curve than a simple data-in-results-out pipeline, it is not as difficult as you might think. In this talk, Iva Veseli (HIFMB) will introduce the anvi'o platform, discuss the various ways to learn and use anvi'o, and demonstrate how these strategies fit different research needs and users with different levels of computational experience.	Iva Veseli	[Introduction to Anvio presentation](#)
11	30.08.2023	CANCELED			
12	26.07.2023	Summer break			
13	28.06.2023	Introduction to the Nagoya Protocol	On access to genetic resources and the fair and equitable sharing of benefits arising from their utilization	Rebecca Aepfler	[Nagoya Protocol Presentation](#)
14	31.05.2023	Albedo, the new Ollie	In this seminar we will introduce the AWI's Albedo HPC System. The computer's hardware will be introduced along with a beginner introduction to using the machine, including recommended storage locations, available software, and usage of the batch system for scheduling your computations	Paul Gierz	[VideoRecording.mp4](#)
15	26.04.2023	Rasdaman	News from Datacube Land: rasdaman, Standards, and Federation	Peter Baumann	[News from Datacube Land - Rasdaman](#)
16	29.03.2023	Easter break			
17	22.02.2023	Drift&Noise	Navigating Icy Waters: Harnessing Earth Observation and AI for Optimal Polar Routes	Lasse Rabenstein	[Navigating Icy Waters Presentation](#)
18	25.01.2023	GitLab	Introduction to Gitlab.awi.de	Nico Harms	2023-01-25 O2A - Git.pdf
19	**2022**				
20		Christmas break			

21	30.11.2022	Dataflows in O2A Framework	Digital data Acquisition–Mobile Apps and Tools for Data acquisition: • Voice recognizing data aquisition • How to document events in the field (Mobile Event Log) • Citizen science app based (MyThaw)	Data Logistics Support group (DLS): ■ Norbert Anselm ■ Maximilian Betz ■ Janik Eilers ■ Sebastian Immoor ■ Rebecca Lauerburg	 DLSIntroAWI.pdf
22	26.10.2022	Autumn break			
23	28.09.2022				
24	31.08.2022	Summer break			
25	27.07.2022	Summer break			
26	29.06.2022	Unlocking the potential of ML for Earth and Environment researchers	Abstract: As Helmholtz AI Consultants, we support Helmholtz-based researchers on making the best use of ML methods for research questions related to Earth and Environmental sciences. This talk will introduce you to the way we work and what we have on offer for you. We will give insights into typical problem statements from Earth observation and Earth System modelling that are good candidates for experimentation with ML methods and report on our accumulated experience tackling such challenges with individual support projects. Given sufficient amounts of data and initial scientific problem statements, we work towards assembling practically meaningful demonstrators within a couple of months, laying the groundwork for further research projects. Example projects include wind speed regression on GNSS-R data, emulation of atmospheric chemistry modeling, Earth System model parameterizations with ML, marine remote sensing and time series analysis. We are happy to share our experiences and discuss the development of ML methods, prototypes and projects based on your input and scientific needs.	Tobias Weigelt (DKRZ)	
27	25.05.2022	Pentecost break			

| 28 | 27.04.2022 | GFBio: Publish your sequences with metadata | **General Introduction (15 min)**

• Data submission as part of Research Data Management
• GFBio's single point of entry for submitting data to ENA & PANGAEA
• NFDI4Biodiversity as a sustainability concept

Introduction to MIxS (15 min)

• What is MIxS
• Packages available
• Examples
• ENVO - the Environment Ontology
• MIxS and ENVO together

Demo (30 min)

• Submission template for sequence data
• Available fields (default fields and suggested for FAIRness)
• Walk-through example with a glimpse behind the curtains | • Jimena Linares (GFBio e.V.)
• Ivaylo Kostadinov (GFBio e.V.) | 📎 RDM_GFBio_O2A_...2022-04-27.pdf

📎 RDM_GFBio_MIxS...2022-04-27.pdf

📎 Jour-fixe O2ARe...0427 0702-1.mp4 |
| 29 | 30.03.2022 | Machine learning | • AI user group @AWI
• "Deep Learning for mapping permafrost disturbances", Ingmar Nitze
• "Quality Control of a Marine Dataset with an Autoencoder", Felix Reimers
• "Automated flagging of a suspected temperature gradient error using supervised CNN architecture", Mohamed Chouai | S. Pinkernell | • Mailing List: AI-Group |

30	23.02.2022	Portal earth-data.de		R. Heß, K. Albers	2022-02-...sion.pdf
31	26.01.2022	AWI's Cloud & Workspace	1. Storing data at AWI 2. Existing services 3. Roadmap 4. Questions/feedback?	A. Steinbach	
32	**2021**				
33		Christmas			
34	24.11.2021	Research Information Systems (RIS)	1. What is RIS and which scholarly output will be used for the metrics? 2. RIS prototype 3. Roadmap 4. Questions/Feedback	A. Starmans + T. Hoffmann	
35	27.10.2021	Managing Research Data	1. Data Management: Overview 2. Data Management Planing 3. Data Management: Tools 4. Issues related to DNA/RNA sampling activities 5. Questions/Feedback	J. Felden (AWI). I. Kostadinov (GFBio e.V.)	AWI-FDM-...0-27.pdf PANGAEA_...mall.pdf
36	~~29.09.2021~~	~~Research Information Systems (RIS)~~	1. ~~What is RIS and which scholarly output will be used for the metrics?~~ 2. ~~RIS prototype~~ 3. ~~Roadmap~~ 4. ~~Questions/Feedback~~	~~A. Starmans + Library~~	
37	25.08.2021	Summer break			
38	28.07.2021	Summer break			
39	30.06.2021	CANCELLED AWI's Cloud & Workspace			
40	26.05.2021	Mobile ActionLog App	1. How it works 2. Integration into O2A 3. Roadmap 4. Questions/Feedback	N. Anselm	20210526_mobileActionLogApp_slides.pdf App and binaries: https://gitlab.awi.de/data-logistics-support/MobileActionLog-Binaries_Utilities Report at meereisportal.de: https://ogy.de/u5wy Contact: Maximilian Betz || Norbert Anselm

41	**VC: https://awi.webex.com/awi-en/j.php?MTID=mfa13be2bdd5897800c3b17229a7adae9** Due to Pentecost vacation, we have preponed this meeting to **14.04.2021.**	Machine learning	"Meet & Greet" to learn about machine learning activities @AWI - Short presentations: AI Projects and Use Cases "ML infrastructure at AWI" (Long Phan) "A deep-learning approach for mapping retrogressive thaw slumps across the Arctic" (Ingmar Nitze) "Deep Learning for Supporting Ocean Data Quality Control" (Sebastian Mieruch) "Melt ponds and subglacial lakes – how Machine Learning can help" (Niklas Neckel) - Open Discussion	S. Pinkernell, G. Busatto, L.D. Phan	If you would like to give a short presentation (5-10 minutes), please contact Stefan Pinkernell / Giorgio Busatto / Unknown User (lphan)
42	**VC: https://awi.webex.com/awi-en/j.php?MTID=ma14aff9ed1bc45d3c20a144a5e87f6aa** Due to Easter vacation, we have preponed this meeting to **24.03.2021**.	Data Licenses	1. Overview 2. Creative Commons 3. Questions/Feedback	U. Schindler	
43	24.02.2021	Data analysis and visualization of unstructured model grids with psyplot	1. Introduction to the psyplot python modul 2. How to visualize unstructured model data grids 3. How to apply data analysis 4. Examples 5. Questions/Feedback?	Philipp Sommer (HZG) (T. Dinter)	Material: https://github.com/Chilipp/psyplot-O2A-Jourfix-20210224
44	27.01.2021	Cancelled			
45	**2020**				
46	02.12.2020	PANGAEA	1. What is PANGAEA? 2. What to look out for when filling out data submission form 3. Data paper versus paper publication - Two complementary but not necessarily depending processes 4. Questions/Feedback?		
47	30.09.2020 postponed 28.10.2020	My "Workspace"	1. Where can I store my data? 2. Which platforms are available for data processing? 3. Collaborative platform solutions at AWI and external solutions 4. Outlook 5. Questions/Feedback?		Webminar recording: https://nextcloud.awi.de/s/xzbLYHRnXAT3yXR Webminar O2A-Workspace-Webminar.zip Already have an AWI account, need VPN access? ✉ helpdesk (at) awi . de
48	24.06.2020	O2A in Project MOSES	Feedback/clarification for MOSES project participants at AWI Potsdam >> *Postponed to late Fall 2020. New date TBA in Potsdam*		

49	27.05.2020	Machine learning and more	1. Machine learning, deep learning and artificial intelligence basics for beginners 2. Python libraries for ML and DL 3. Infrastructure at AWI 4. Questions/Feedback?		AI tools & projects o2a-training-2020-05-27-material.zip Presentat...satto.pdf
50	~~29.04.2020~~	~~Machine learning and more~~	1. ~~Machine learning, deep learning and artificial intelligence basics for beginners~~ 2. ~~Python libraries for ML and DL~~ 3. ~~Infrastructure at AWI~~ 4. ~~Questions/Feedback?~~ >> Postponed to 27.05 due to CV crisis		
51	~~25.03.2020~~	~~Machine learning and more~~	1. ~~Machine learning, deep learning and artificial intelligence basics for beginners~~ 2. ~~Python libraries for ML and DL~~ 3. ~~Infrastructure at AWI~~ 4. ~~Questions/Feedback?~~ >>Postponed to 24.04 due to CV crisis		
52	26.02.2020	Rasdaman, big data analytics solutons	1. What is rasdaman? 2. rasdaman@AWI 3. Demo: petascope web interface, jupyter notebook examples 4. Integration into GIS infrastructure at AWI 5. Questions/Feedback?		http://rasdaman1.dmawi.de/
53	**2019**				
54	27.11.2019	Software Versionning	1. Why version control? 2. Git and alternatives 3. Git concepts, ecosystem 4. Git basics 5. Hands-on demo a. Gitlab and Jupyterhub 6. Questions/feedback?		https://gitlab.awi.de https://github.com/o2a-data (GitHub repository for "O2A-data") Documentation: GitLab Documentation Presentation
55	30.10.2019	Jupyterhub	1. Jupyter notebooks: basic concept 2. Hands-on JupyterHub at AWI 3. Questions/Feedback?		https://jupyterhub.awi.de; Documentation: Jupyterhub Documentation (old Version) Presentation