

**Workshop AI for Earth System Science - Ocean & Cryosphere in Climate -
22.05.2023, 9:00 - 12:15, Digital Format**

<https://awi.webex.com/awi/j.php?MTID=mf3a926ef31986b63419a3303849b2af7>

9:00 – 9:10 Welcome (Willi Rath)

9:10 – 12:05 Presentations

(each presentation 15 min incl. discussion and switch from one to next presentation)

9:10 – 10:25 AI methods and applications (Chair Stephan Frickenhaus)

Ingmar Nitze: AI in permafrost research: Detecting and understanding rapid permafrost landscape dynamics (AWI-Potsdam)

Marco Landt-Hayen: Reconstruction of global atmospheric patterns from sparse data (GEOMAR)

Mareike Körner & Yannick Wölker: Spike detection in microstructure data (GEOMAR)

Franz Kanngießer: Reconstructing partially obscured spatial patterns (GEOMAR)

Willi Rath: Overview of GEOMAR activities or Lagrangian data aggregation (GEOMAR)

10:25 – 10:35 Break

10:35 – 12:05 Explainable AI and AI Enablement (Chair Doris Dransch)

Mike Sips: Interactive Exploration of Hyperparameter Spaces for increasing users' confidence in effective parameter settings using the ClarifAI-System (GFZ)

Reyko Schachtschneider and Jan Saynisch-Wagner: Application of the ClarifAI-System to optimize a climate impact related echo state network (GFZ)

Erik Chan: Community Activity Telegrafenberg (AWI-Potsdam)

Enno Prigge, Stephan Frickenhaus: Community and Capacity building in the MarData School (GEOMAR, AWI)

Stefan Pinkernell: "AI/ML infrastructure and support" (AWI)

Laura Haffert: "AI & visualization support by GEOMAR's Data Science Unit" (GEOMAR)

12:05 – 12:15 Wrap up (Willi Rath)

Participants

GFZ:

Reyko Schachtschneider

Jan Saynisch

Mike Sips

Peter Mohrstein
Doris Dransch

AWI:

Ingmar Nitze
Stefan Pinkernell
Stephan Frickenhaus
Erik Chan

GEOMAR:

Abhishek Savita
Carola Trahms
Enno Prigge
Franz Kanngießler
Laura Haffer
Marco Landt-Hayen
Mareike Körner
Meike Klischies
Sebastian Wahl
Sweety Mohanty
Warner Brückmann
Willi Rath
Yannick Wölker