

Echosounding Training Cruise with RV Polarstern

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Date & Time:	November 10 – 18, 2018 Please note that final dates might shift by +/- 1 day!
Location:	RV Polarstern
Language:	English
POLMAR credit points:	10
Registration:	info.polmar@awi.de
Application procedure:	Deadline for application is April 8, 2018. Applicants are requested to submit: a short proposal indicating their field of work, any pre-knowledge in echosounding techniques, relevance of the ship-based training for their Master or PhD project (if applicable) and add a paragraph of motivation why they want to participate (max 1 page).

Course content:

The Helmholtz Graduate School for Polar and Marine Research (POLMAR) at AWI and the University of Bremen/Department of Geosciences jointly offer a training cruise with *RV Polarstern* during leg PS 116 between Bremerhaven and the Canary Islands.

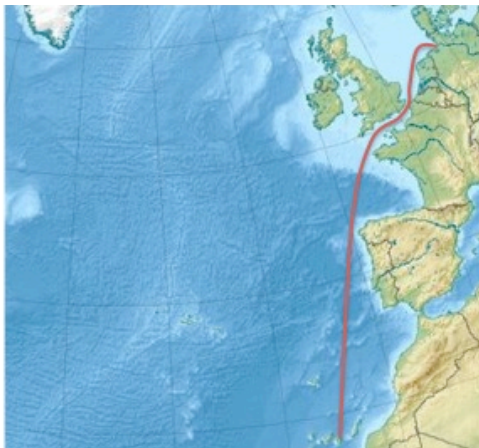
The aim of the cruise is to train participants for self-efficient operation of the echosounding systems of *RV Polarstern* (this includes the hull-mount Parasound system P-70 and Hydrosweep). The training programme comprises lectures, practical training on the hydrosweep and parasound systems, supporting the regular watches as well as literature work. Students will work in pairs of two in 2-4 hour-shifts (24/7). All participants are required to give a 15 min presentation on their Bachelor, Master or PhD project.

The course will start with a theoretical introduction into the physics of echosounding, followed by a general introduction into the operating systems. Both systems will be operated continuously

between Bremerhaven and Las Palmas with participants being responsible for the operation of the systems.

Practical exercises are complemented by discussion of published case studies in order to apply and deepen the gained knowledge. Participants will learn to combine sediment core and multibeam-bathymetric data with Parasound profiles. They will further learn how to plan a bathymetric survey from acquisition to final map products. The workflow includes data acquisition with the Atlas Hydrosweep software packages Atlas Hydromap Control (AHC) and Atlas Parastore, data with the software packages CARIS HIPS and SIPS®, visualisation of data with the software package QPS Fledermaus® as well as import of post-processed data into a geographical information system (GIS) for map generation.

The course can host up to 10 Master students and up to 10 doctoral candidates.

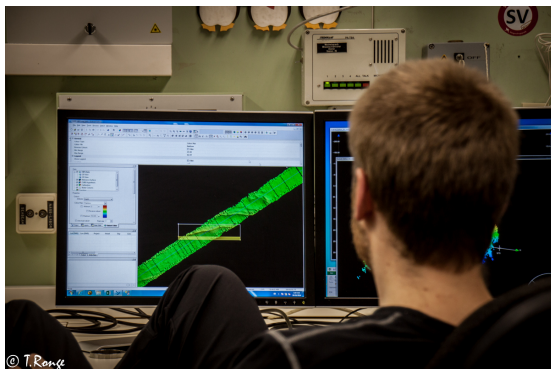


Cruise track:

Embarkation will take place in Bremerhaven. Port of disembarkation is Las Palmas, Canary Islands.

Target group:

The training addresses Master and PhD students from geosciences and bathymetry. In case of place availability, students from other fields of marine sciences are equally welcome. The final decision is jointly taken by the team of lecturers and POLMAR.



Costs:

Students have to cover their travel expenses for the return flight to Germany and, if needed, one overnight stay in Las Palmas. Course, accommodation and full board on RV Polarstern is free. POLMAR members can apply for travel support. Pre-requisite is a valid passport and visa for Spain (if needed).

Left: Student on watch on the Hydrosweep System during PS 88. Photo courtesy of T. Ronge (AWI).