

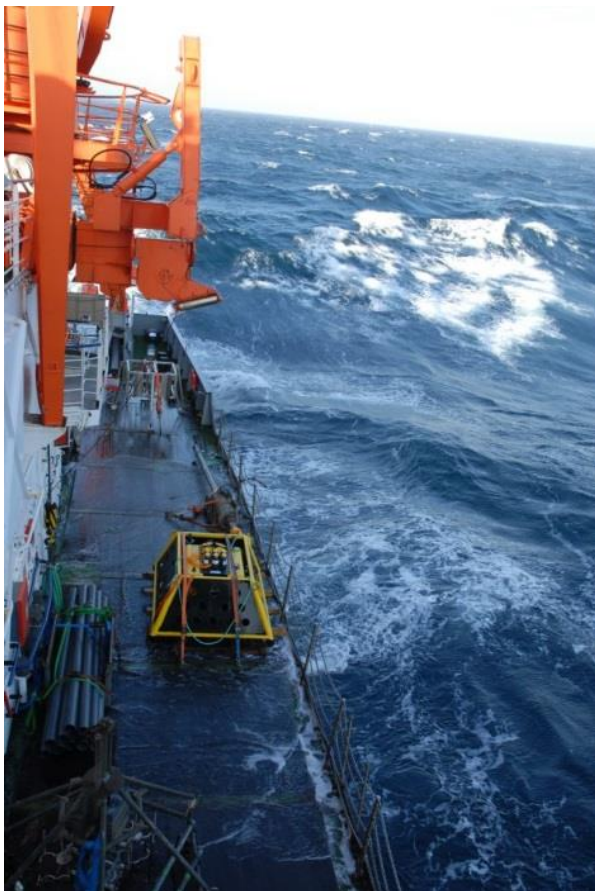
RV POSEIDON cruise 518/2

12 October – 27 October 2017 (Bremerhaven – Kiel)

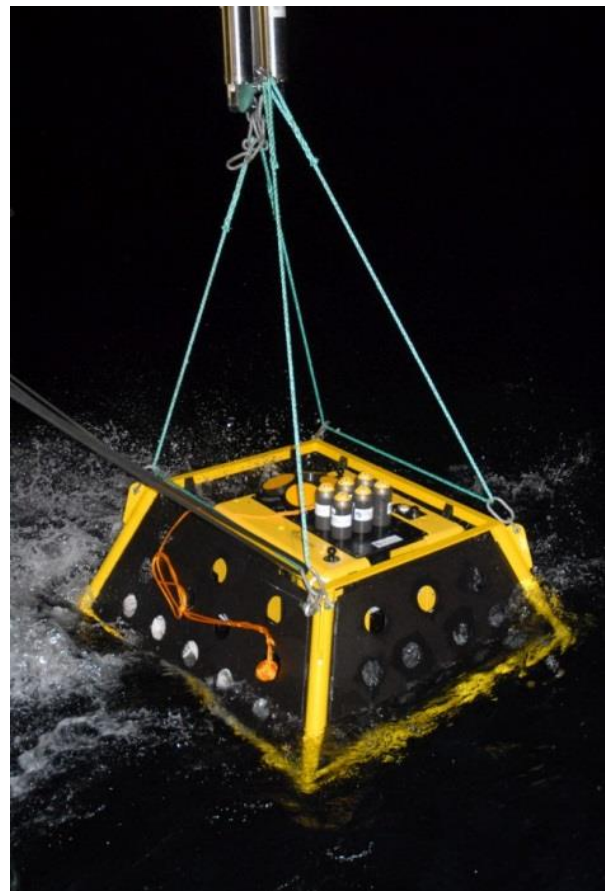
1st Weekly Report

During Leg 2 of cruise POS518 three different benthic landers will be deployed to obtain oceanographic and biogeochemical baseline data for a small research-scale CO₂ gas release experiment planned for 2019. Sediment cores obtained by gravity and multicorer will be collected for sediment biogeochemical analyses and video-CTD casts will be used to study trace gases, nutrients, and the carbonate chemistry of the water column.

Eight participants of leg 2 boarded on Wednesday afternoon of October 11th already to exchange information and take over for the last two and a half weeks of cruise POS518. The 2 trucks with the scientific equipment were unloaded the next day and the remaining 3 participants arrived to complete the scientific crew and helped to prepare the instrumentation on deck and install the scientific instruments in the ship's laboratories. After the return of one deck hand from the doctor we left Bremerhaven and set sail through the river Weser mouth on Friday morning at 9:30 UTC. Starting with sun shine the weather changed already after passing the lighthouse "Roter Sand" towards overcloud with stronger winds of up to Bft. 6. Here we met the ice breaker POLARSTERN on its return from the Arctic. We arrived in the working area at the Goldeneye Platform on Sunday morning, 15th October at 11:00 UTC with strong winds (Bft. 7) and up to 4 m high waves. Under these weather conditions no deployment of scientific gear was possible.



Working deck with launcher, gravity corer, NOC Lander and multicorer at stormy weather.



Deployment of the NOC-Lander.

As the wind ceased during the night, we were able to perform a CTD and multicorer cast and deployed the NOC-Lander, a satellite lander and a BIGO Lander at Goldeneye in the morning of the 16th October. Whereas the latter landers will be recovered during this cruise, the NOC-Lander is scheduled to be retrieved on a subsequent POSEIDON cruise in August 2018. The lander will release data messengers every 3 months to provide data via satellite during this long deployment period. Acoustic communication with the lander via modem provided the working status of the lander at the seafloor.



Preparation of the BIGO Lander for deployment.

Deployment of the BIGO-Lander with launcher.

(all pictures P. Linke, GEOMAR)

However, after this deployment we had to leave and headed westwards to take shelter in the Moray Firth in Scotland as Hurricane “Ophelia” approached the United Kingdom. In the early morning of the 18th October RV POSEIDON returned to the working area at Goldeneye. A CTD and a multicorer station were conducted before the BIGO Lander was retrieved successfully.

On behalf of all participants with best wishes,

Peter Linke, chief scientist