

Cruise Progress 15th April, 2018

Cruise Plan

- 07:15 - arrival of students on the Heincke
- 08:00 - departure from Helgoland
- 08:30 - station 2: 'Tiefe Rinne', use of CTD and SVP, Multinet, Box core -> station end: 09:30
- 10:00 - Matras testsite - 6 lines, about 1nm each, 50 meters apart
- 11:30 - WP mudpile - 54.089720 N, 7.967778 E
- 13:30 - station 3 - mudpile, use of CTD and SVP, boy core (maybe MUC?) -> station end: around 14:00
- 14:00 - WP Hela - 53.622596 N, 8.474157 E
- 15:00 - station 4 - Hela, pass over wreck, then 'butterfly' (towed side scan)
- 16:00 - end stations, make towards Helgoland
- 17:00 - Arrival port Helgoland

Brief lectures

- Sediments/geological development of the German Bight (*A. Benthier*)
- Introduction of the CTD and deployment (*W. von Appen*)

Tasks

- preprocessing of tide files for processing of multibeam data
- setting up of the camera system for microscopy
- cleaning of the multinet
- prepping the box core/gravity core
- processing of multibeam data

Instruments used

- CTD for several stations, potentially taking several samples at different depths on a single deployment
- SVP at Tiefe Rinne
- Box core sediment samples (Tiefe Rinne, another sample later at the mud pile to investigate the differences in sediment composition of the two sites)
- Multibeam (Hela shipwreck)
 - > lines 79, 80, 83, 84, 86, 88, 89, 91 and 93
 - > possible ship wreck at 54.1420790, 7.8834519
- Side scan sonar (also for the Hela to improve resolution, yesterday's images were not that good with just the multibeam)
 - > towed behind the ship, 'butterfly' track
- Multinet

Hela shipwreck

- 53.622596 N, 8.474157 E
- Three passes over the wreck
- used multibeam (good signal, 3rd one not so good due to noise) and sidescan (at first no signal, then signal, mediocre quality)

