Expedition SO MerMet17-06 – IceAGE3

Emden – Emden

Weekly Report No1

22.06. - 28.6.2020

Icelandic marine Animals: Genetics and Ecology

Tail wind and backing

MerMet17-06 is a special journey in Corona times. We owe the fact that we can be on an expedition to the tireless efforts of everyone involved. After everyone got through the Corona Test Camp healthy and negative (and that's positive!), crew and scientists were able to get on board on June 21, 2020. On June 22nd, 2020 it was time to get started and FS Sonne set off northwards with the destination 65 °N and the 0 Meridian. This position is in the Norwegian Basin and is the first stage of three on this journey, which will take us north to the Arctic Circle at 66 °, past Iceland and its cold water corals and geothermal activity, back to the south and into the depths of the Icelandic Basin.

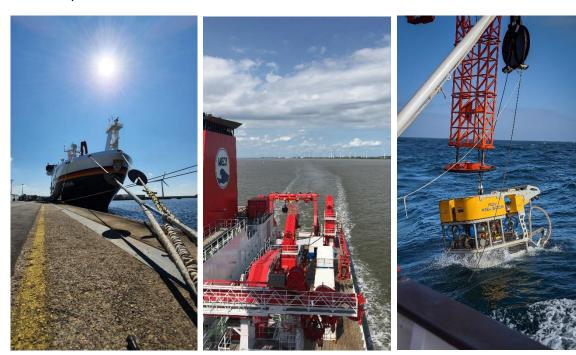


Figure 1: Photo gallery with photos of (in order): 1,2 - Angelina Eichsteller: FS Sonne at the berth in Emden and leaving back the coast going on the North Sea; 3 - Viola Siegler: ROV Kiel6000 diving into the water for it's 1st dive.

On Thursday, June 25th we reached the first field of work faster than expected with a tailwind and beautiful summer weather. This tailwind and Poseidon's backing continued and all sampling was successful. In addition to the inauguration and baptism of our new camera epibenthic sled named "Ursula", the well-known devices such as multicorer and boxcorer as well as plankton net were used. The ROV Kiel 6000 and the first deep dive were the highlight of the week. In eight 250m long transects, the ROV flew over the ocean floor at a height of 2m and amazed not only us, but our international audience. From June 24th we had the opportunity to broadcast the dives of the ROV Kiel6000 live with increased bandwidth. In particular, the seacucumbers appearing *en masse* caught everyone's eye during the dive. Our

livestream can be found at https://www.youtube.com/watch?v=2C0KWvF_eZg. With the help of the livestream from our "showroom" we can bring the international cooperation partners of the IceAGE project on board so that they can support both the determination of the observed animals and the sampling with their expertise directly during the dive.

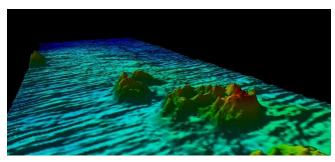


Figure 2: Impression of the sea floor in the first work area during mapping with the ship's multi-beam (photo: Mia Schumacher, GEOMAR).

The video transects of the "sea cucumber garden" thrilled some people on board and our on-board photographer Solvin Zankl was able to take the "*Elpidia*" picture he had been longing for - as the lovingly named "sea pig" animals with the Latin generic name are called.



Abbildung3: Elpidia Théel, 1876 on the sea floor in 2900m water depth at 65 ° N (Photo: ROV Kiel6000, GEOMAR).

In the meantime we are in the 2nd work area directly above the Aegir Ridge. The fresh northeast wind blows us around the nose and allows continuous sampling with the benthic devices. Looking ahead to the coming week, we look forward to less wind and less waves on Wednesday, when our 2nd ROV dive will take place.

We send highly motivated greetings from ashore,

Dr. Saskia Brix Senckenberg am Meer