Expedition SO276 (MerMet17-06) – IceAGE3 Emden – Emden Weekly Report No. 5 20.07. - 26.7.2020



From gigantic cucumbers and oceanographic networks

On Monday and Tuesday of the fifth week on board, we were able to sample a depth of 4500m in the *Porcupine Abyssal Plain* (PAP). The deep-sea fauna there is known to be dominated by holothurias (sea cucumbers, Figure 1a). The occurrence of hard corals living in the sediment, which were found in our samples, are rather unknown. With the Monday mapping dive (the last ROV dive of this trip) we were able to close the video transects in the deep sea plains south of Iceland, albeit with a bathymetric gap due to the relocation of the station work south of the storm.





Figure 1: a) This purple sea cucumber is approximately 50 cm tall. Sea cucumbers exist in all shapes, sizes and colors. b) The only device on board that can fall over the side into the water without a crane: Simon Tewes, BSH, presents the third ARGO-float.

After all benthic devices had been used for the last time in the PAP, all station work was ended on Wednesday evening with the third and last suspended ARGO float (Figure 1b). ARGO floats float on their journey. These floats are part of a huge international project and essentially drift with the water currents while at the same time measuring salinity, temperature and pressure across different water layers. During the writing of these lines, around 4,000 swimmers are used in the world's oceans.

Wednesday was already under the star of sample preparation "behind the scenes" (Figure 2). The last samples were then taken care of and sorted on Thursday, extractions were carried out in the genetics laboratory, and then on Friday the laboratory equipment was put back together and packed in boxes. During the transit through the English Channel back to Emden we were accompanied in the Biscay by jumping dolphins and two homing pigeons who drove in the sun "taxi" while the ship was very busy and all laboratories were cleaned and the containers were packed.



Figure 2: Sorting, analyzing, archiving: a normal day in the laboratories. From left to right - Angelina Eichsteller (DZMB Wilhelmshaven), Jenny Neuhaus (DZMB Hamburg), Nicole Gatzemeier (DZMB Hamburg), Karen Jeskulke (DZMB Hamburg)



Figure 3: The scientific team on board from an aerial perspective. From left to right - back row: Severin Korfhage (drone pilot), Viola Siegler, Tina Stein, marco Bruhn, Maik Wilsenack, Solvin Zankl, Nico Schleinkofer, Simon Tewes, Karlottaürzel, Eva Paulus, Stefanie Kaiser, Morgane LeSaout, Martin Pieper, Hannes Huusmann, Thorsten Lux, Matthias Bodenhöfer: middle row: Lisa Gärtner, Vivien Hartmann, Carolin Uhlir, Jenny Neuhaus, Nicole Gatzemeier, Karen Jeskulke, Anne-Nina Lörz, Inken Suck, Saskia Brix, Patrick Cuno, Mia Schumacher, James Taylor; front row: Jana Kabus, Nancy Mercado Salas, Angelina Eichsteller, Fritz Abegg, Florian Bischof, Scrad (our IceAGE mascot).

This special journey comes to an end with the passage through the lock and entering Emden. We say goodbye to RV Sonne and our corona-free time on board.

Sunday, July 26th, 2020

Saskia Brix, Chief Scientist Senckenberg am Meer