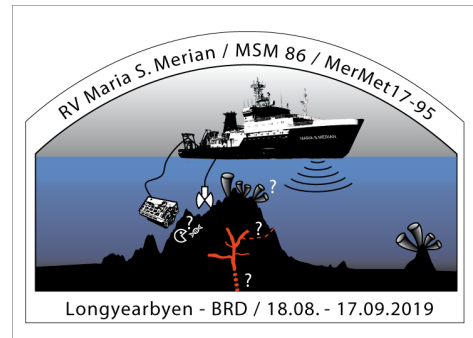


**FS Maria S. Merian Expedition MSM-86
Longyearbyen – Emden (18.8. – 17.9.2019)**

4th weekly report



Our expedition will come to an end tomorrow. Until the very end we continued to take samples, before we started our transit back to port in Emden, Germany. We had to hurry to get out of harms way of a big storm approaching from the west. This storm hit the Faroer Islands yesterday at wind speeds > 100 kph and caused the seaswell to build up to 14 meters. At that time we were off the coast of southern Norway where conditions were more benign with wave highs between 4 and 5 m.



Saturday night, an approaching storm system had sea state deteriorate a bit. The picture was taken from a secure place inside the hangar (Photo Beate Slaby)

We are busy with the cruise report and can now see from the assembled station and sample lists how much we were able to accomplish. With >160 rock samples and >400 biological samples we are looking at quite a bonanza. We also did seafloor mapping along a roughly 2400 nautical miles long track and produced maps of very high quality.

From the get go of our station work the video-guided grab and its master, Ede Fabrizious, were busy frequently and rounded up more than 70 operations in this single cruise.



This sampling system is not used all that regularly, but it performed beautifully during our cruise. Sometimes, it would bring out very large chunks of rocks that weighed more than 100 kilograms. Those needed to be chopped up into smaller pieces with a sledge hammer on our ship's working deck. Smaller and more delicate, in contrast, were the samples retrieved by ROV MARUM-Squid during numerous dives. The detailed documentation of the faunal habitats with the ROV's camera systems provided great video sequences and still-shots of the areas sampled. Also, the samples could be secured in a tailor-made biobox that allowed for the recovery of pristine specimens

Christoph Beier (University of Helsinki) is happy about a particularly large piece of volcanic rock (Photo Julia Bauer)



Sponges of highly variable shapes and sizes in the biology lab. (Photo Ieva Caraitė)



Just a few hours ago, a group photo was taken in the hangar of RV Maria S. Merian. With this photo, we would like to say good bye to our readers.

Our sincere thanks go to everyone who helped with preparations prior to and operations during the cruise. We are particularly grateful to the master, mates, and all crew for the excellent work they conducted and the good team spirit during the entire cruise.

With kind regards,

Wolfgang Bach

15 September 2019, at sea c. 55°N, 5°E

Universität Bremen