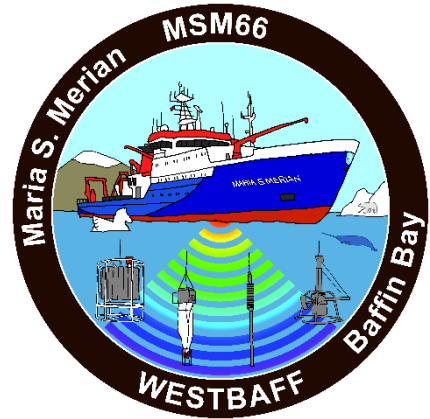


RV *Maria S. Merian*

Expedition MSM66 – WESTBAFF

22.07. – 28.08.2017

Nuuk (Greenland) – Reykjavik (Iceland)



6. Weekly report

21.08. – 27.08.2017

The last week was all about transit plankton work, the hunt for corals and a wreck. Tomorrow with the arrival in Reykjavik, Expedition MSM66 ends.



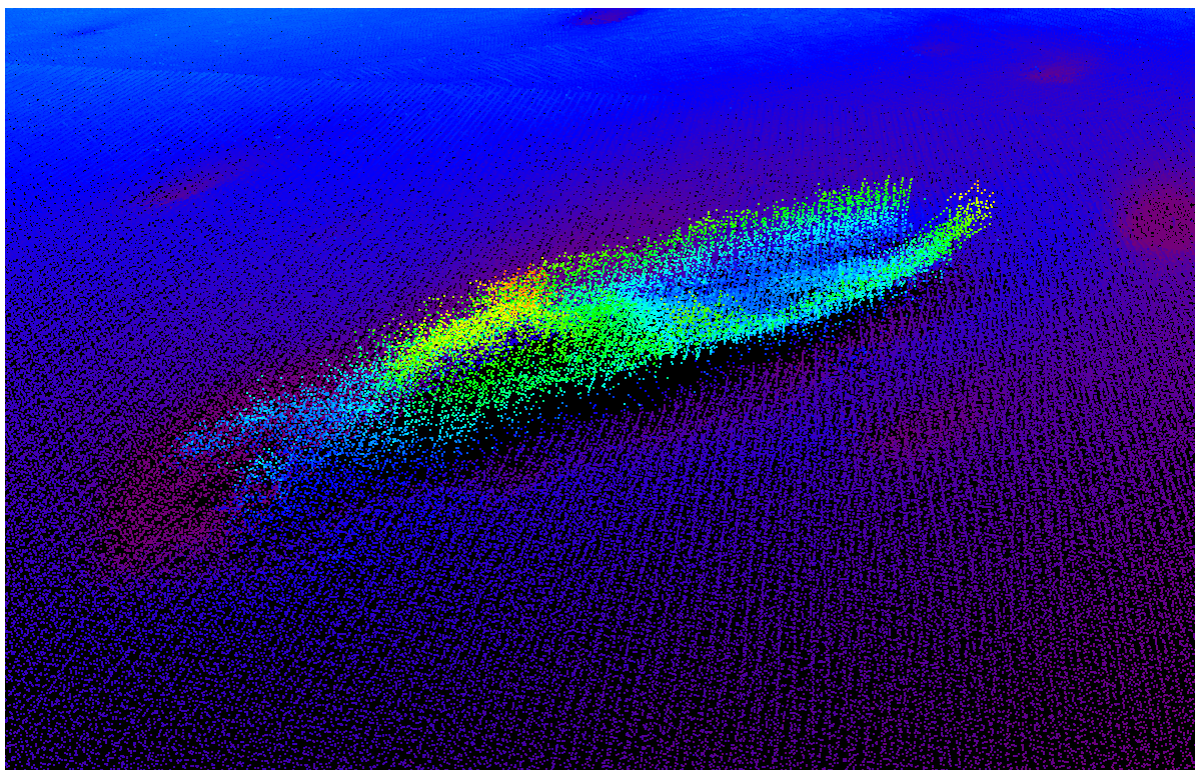
(Chase the ice . Photo V. Diekamp, MARUM)

This week started with sampling sea ice. The aim was to investigate whether foraminifers attach to sea ice. Therefore, several pieces of ice were collected from the ship and with the RHIB. After sampling the sea ice, it now remains to await the results of the analyses after the expedition. The sea ice station was our last activity in Baffin Bay. Soon after, we passed through the Davies Strait and entered the Labrador Sea on our way to southwest Greenland, where we tried to sample potential cold-water coral carbonate occurrences.

The hunt for corals turned out to be rather frustrating. After a night of mapping the rough continental slope of southwest Greenland, we sampled promising mound features at a canyon head in 650 m to 750 m water depth. This was more difficult than anticipated. In this

area, surface current of up to one knot prevailed. Even the two tonne gravity corer was deflected in a way that we had to account for drift in order to hit the couple of hundred metre-sized targets on the spot. Because of the very good manoeuvrability and a position beacon on the sampling equipment, it was nevertheless possible to sample the summit regions of the selected mounds accurately. It became, however, apparent that at least the surfaces of the targeted mounds consisted entirely of gravel. Eventually, we only managed to bring some hands full of rocks and stones on deck. The following night, we extended our search and mapped the continental slope adjacent to the east. There, we selected additional mounds in 850 m to 1230 m water depth and one site in a canyon. In this way, the depth interval in which cold-water coral mounds typically occur were covered. Unfortunately, again all samples recovered the next day only consisted of gravel. At least, we know now that neither coral bearing sediments nor soft sediments occur at the sampled mounds.

After this, a last highlight of this cruise remained. Prior to the expedition, we were asked to map a wreck close to Kap Farvel. This wreck is thought to be the Terra Nova, the ship Scott sailed to Antarctica for his race to the South Pole. Our goal was to map this wreck in high resolution to see if icebergs have damaged the wreck since its discovery. In one pass, the first multibeam profile covered the wreck. Additional profiles increased the data density. In the resulting point cloud, the wreck is nicely imaged. New damage due to ice bergs cannot be seen.



(Terra Nova, image S. Dreutter, AWI)

When leaving the Terra Nova, all scientific work was finished and the rev-up and clean-up started. Boxes had to be packed and store in the containers, labs had to be cleaned and reports had to be written. Now with just a couple of hours to go, this is all finished and we are awaiting our arrival in Reykjavik.

In retrospective, I can say that the expedition has been very successful and the analyses of the collected data will certainly keep us busy for a while. The atmosphere on board, the cooperation amongst the scientists and between the scientists and the ship was excellent throughout. I very much enjoyed this expedition and hope it was the same for everybody else.

With Iceland in sight, I send for the last time greetings from MSM66 on behalf of all on board RV Maria S. Merian,

Boris Dorschel