Maria S. Merian **Expedition MSM70**: BATHYCHEM - Bathymetrists Seamounts

4. Weekly Report
Atlantic 7°23' N/ 22°16' W, 21th January 2018

The working routine with an alternation of seafloor mapping and rock sampling by dredging was continued also in the fourth week of the expedition. In this week we targeted the southern working area that consists of the Webb & Gilg Seamount (described in the last weekly report) and multiple smaller, mostly solitaire Seamounts. Most of those are so far unnamed. For every seamount we needed half a day to a day to map the structure. Since the bathymetric data are continuously processes on board, we can use the seafloor models already 10 minutes after the recording of the data for the location of suitable Dredge transects. On each of the seamounts we then carried out a maximum of up to three dredge tows, depending on the quality of the samples that are collected and the geological position of the seamount (for example, did we collected good samples from a neighbouring seamount?). With this successful strategy we could map this week ~17.000 km^2 and performed 11 Dredges tows, from with 9 collected volcanic rocks from 6 seamounts. Last night we completed the mapping of the western part of Webb & Gilg Seamount and with that, we could completely finish the mapping of the southern working area with a good coverage of recovered samples. With one week of working time left, we now move along the west side of the Bathymetrists Seamounts direction North to conclude the central and northern working areas. In the meantime also the work on the different reports, including the final cruise report, started – an important part of the correct archiving and rationalisation of a research cruise.

All participants on board *Maria S. Merian* are in good health and the atmosphere is good. In name of all expedition participants, best greetings from Maria S. Merian,

Froukje van der Zwan

A dredge containing geological samples is brought on deck during the night. Photo J. Schönberg.