Cruise MSM88/2

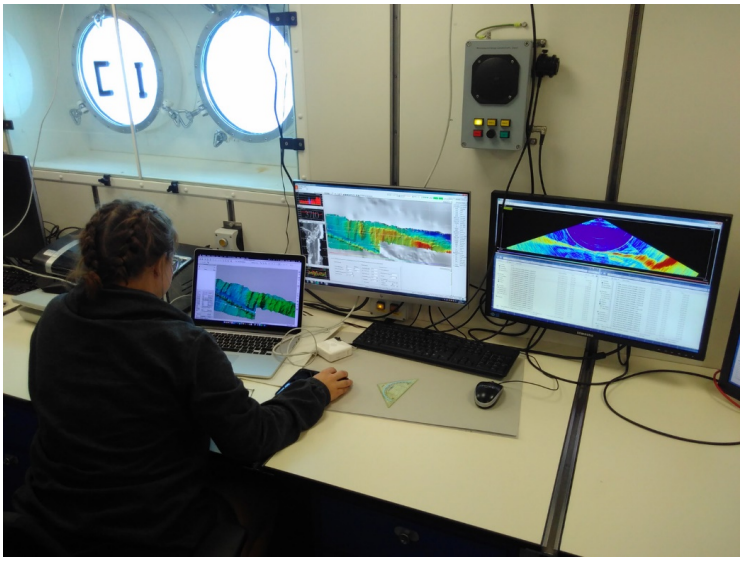
Bathymetric mapping of the seafloor - a German contribution to completing the map by 2030

19.12.2019 - 14.01.2020

From Mindelo (Cabo Verde) - to Bridgetown (Barbados)

3. Weekly Report, 30.12.2019 – 05.01.2020

At the age of 14, Morgane Le Saout first heard of plate tectonics in the classroom. Her teacher asked her to draw the plate boundaries across on the world map, it was from this moment on that Morgane knew she wanted to become a marine geologist. Today, Morgane works as a postdoc in the Research Division *Magmatic and Hydrothermal Systems* at GEOMAR and is a member of the scientific party on this cruise. Her typical research is generally at higher latitudes, e.g. the tectonic and volcanic processes off the coast of Iceland, where the North American and Eurasian plates are drifting apart. Similar to that collected on this voyage, Morgane uses bathymetric data to understand the formation of seabed structures and to assign them to certain processes in the interior of the earth or to understand the movement of plates. The value of bathymetric data doesn't stop with Morgane's study, this data is essential for; safe sea navigation, tsunami forecasting, designation of marine protected areas, along with various ocean models. In short, bathymetric data help us more than you might think.



Morgane in the data centre

As of last night, we are now on the fifth and penultimate profile of our cruise and are heading west again. A few hours ago, we passed the Mid-Atlantic Ridge for the third time and have now mapped 45 km of the ridge axis. The total mapped area of the MSM88/2 now amounts to over 110,000 km^2, which is equivalent to the approximate area of Cuba.

Anne-Cathrin Wölfl, Chief Scientist, MSM88/2
GEOMAR Helmholtz Centre for Ocean Research Kiel