## MSM88-1 "German Mapping"

## 09.12.19 - 16.12.19



Although we are only making long profiles across the ocean and, apart from a few flying fish which jump out of the water when we pass, we really don't see many other signs of life, every now and again we have to acknowledge that we are not alone out here. At the

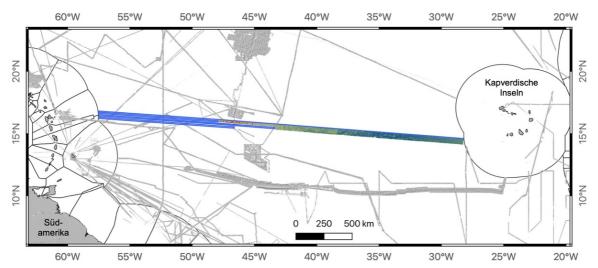


working hard in the field! The protective rubber coating of the magnetometer shows deep gouges, probably from a shark attack.

end of the last profile this morning we once more recovered the magnetometers which we have been towing behind the ship to measure the Earth's magnetic field and so get some information about the age of the seafloor. The first magnetometer arrived on

deck in perfect condition but its twin, which in the water was towed 100m behind it, had some of its rubber casing missing and had also lost a fin! Several small pieces of teeth were embedded in the casing, probably from a shark. Sharks often attack magnetometers, whether that is because of the strong magnetic field they produce during the measurements or whether the shark just goes for something moving quickly through the water we do not know - whatever the reason, we were happy to get the magnetometer back on board still functioning!

And after finishing the last profile, we can present some statistics. We have, in the last almost 3 weeks, mapped a total of 92.485 Km<sup>2</sup> of previously unknown seafloor, an area equivalent to about a quarter of Germany.



Almost half done! At the end of the first leg of MSM88 we have mapped almost 40% of the area targetted for the whole cruise. In the coming weeks Anne-Cathrin Wölfl and her team will finish the rest (blue lines). Grey shading shows the regions mapped up to present globally.

We are now in transit for Mindelo, where we are due in port tomorrow. Labs and cabins are being cleaned and the last data backups being made. All are happy with how the cruise went and with the data we collected.

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