

SO233 Walvis II

Weekly Report No. 6 (16.06.2014 - 21.06.2014)



R/V SONNE 23°S / 14°30′ E

The last week of cruise SO233 consisted of only three working days and one and a half day transit to Walvis Bay from the end of the Walvis ridge. The dredge, TV grab and multi-corer deployments were very successful during the last three days. Most of the dredging was carried out along a steep fault scarp on the northwest side of the Walvis Ridge, which extends from the base of the continental shelf for ~300 km to the SW. The NW facing fault scarp matches up with a SE facing scarp of equal length off the Brazilian coast. The two scarps can be connected by following transform faults across the entire South Atlantic, suggesting that this was a left laterial strike-slip or transform fault. The last, and very successful dredge bringing up very fresh samples, was on a small seamount to the NW of the NE end of the steep scarp, directly at the base of the Namibian continental shelf (only ~60 km from the coast) and must post-date movement along the NE end of the fault. The last station of the cruise was a successful multi-corer deployment on the shelf at about 400 m depth. Two of the highlights of the last week were a jumping whale the did some corkscrew turns in the air (it's now clear why its called the Walvis – whale – Ridge) and the final party, after working without a day off for more than four weeks. Of course the scientists had to get up the next day after the party and thoroughly clean the laboratories and pack all the samples and equipment into the container. The cruise wasn't over until we reached port on June 20.

During the last week the biologists had 2 multi-corer and 1 TV-grab station, all of which yielded lots of sediment and organisms. The encrusting fauna on the dredged rocks was much more abundant near the Namibian shelf than it was in samples from the central and southern parts of the Walvis Ridge. A highlight was the TV-grab, which was deployed on the southern shoulder of a large seamount at a depth of only 354 m. A very coarse, shelly sediment was colonized with large amounts of polychaete worms, crustaceans, mussels and brachiopods. The biologists were kept busy picking this highly diverse community with forceps and scalpel blades. All the samples collected during the cruise are now securely packed, as is all the equipment, and the biologists can't wait to welcome their pickled biodiversity and to start lab work once the containers with all the material are back home again.

All on board are very happy that the cruise was successful and are looking forward to vacation in Namibia or going home soon.

Kaj Hoernle (chief scientist SO233) and the cruise participants







A small red crab collected with the TV-grab.