

M188

Walvis Bay - Walvis Bay 07.03. – 13.04.2023

2nd Weekly Report (13. – 19.03.2023)



In the last week, we had to unexpectedly interrupt the station work for a medical emergency on Tristan da Cunha. Tristan da Cunha (British Overseas Territory), is a remote archipelago of volcanic islands in the central South Atlantic. Only 250 people live permanently on the main island of the same name, which is about 11 km in diameter. The highest point is the summit of the volcano Queen Mary's Peak, with an altitude of over 2000 meters. The island has no airstrip, the only way to reach and leave Tristan is by boat. The islands are rarely visited, according to Wikipedia there are 10 scheduled trips per year from Cape Town.

On the way to Tristan, we crossed a low-pressure trough that brought gale-force winds and heavier seas on Tuesday night. Meteor reached the island on Tuesday afternoon and waited at the island's only town, Edinburgh of the Seven Seas. Entering the small fishing harbor was not possible. North of the island we were well protected from the high swell from southern directions. The patient, his wife and two accompanying doctors were taken to the Meteor by raft and then brought on board. After about two hours, we could leave the island again in the direction of Cape Town.



Meteor on its way to Tristan da Cunha (photo: C. Mertens).

The only settlement in the north of the island, Edinburgh of the Seven Seas (photo: J. Stake).



The two gliders next to the test pool (photo: B. L. Duong).

Glider during ballasting test (photos: C. Mertens).

During the transit the gliders were tested and the surface drifters developed at Hereon were assembled. Gliders are autonomous measurement platforms that can ascend and descend in the water. The small, side-mounted wings gives the glider propulsion, enabling it to cover a distance of several kilometers per day. Depending on the equipment with sensors, different parameters can be measured. On our cruise, in addition to the standard sensors for temperature and salinity, so-called microstructure probes are mounted on top of the gliders to measure turbulent currents in the ocean. The tests in the basin serve to check the ballasting. In addition, the communication and functionality of the sensors are tested. Both gliders have successfully passed the tests and are now waiting for their first deployment.

Sadly, the patient passed away on the night of Friday, March 17. Despite intensive care by the ship's doctor, the accompanying team of Tristan da Cunha, crew members and scientific participants, he could not be stabilized. All involved deserve great thanks and appreciation for their efforts.

After the long transit of 1500 nautical miles, we will reach Cape Town early Monday morning. From there we will return to the working area and continue the interrupted scientific work.

Best wishes from the scientific party of M188.

Christian Mertens (University of Bremen)