



RV Meteor cruise M153 TRAFFIC

15.02. – 31.03.2019

from Walvis Bay to Mindelo

4. Weekly report from 17 March 2019



Control room for TRIAXUS.

The fourth week of our cruise M153 is over now! In the meantime (Friday morning) we have arrived in Walvis Bay. We can really look back to a very successful cruise. We worked at a total of 57 stations in the northern and southern Benguela upwelling systems. We covered the areas with a total of 62 Multinet-maxi hauls, 36 hauls with the Neuston-catamaran, 50 hauls with the RMT and could perform nearly 100 CTD casts. The smaller multinet-midi (carrying nets with 55 or 200 μm mesh sizes) were deployed at selected stations to catch organisms (Micro- and Macrozooplankton) for onboard experiments. The TRIAXUS was towed along several transects of 944 km length in the south and 586 km in the north.

Narrative of the cruise

During our work at stations in the northern part of the Namibian box wind speeds increased steadily to 7-8 Beaufort. This forced us to change some of the planned deployments of gears. The TRIAXUS, planned to do a transect from the northwesterly station to the central coast had to be postponed, and the Neuston-catamaran could not be deployed. We decided to move directly to the position where we had deployed the second drifting sediment trap of Namibian box, that had spent about three and a half days in the water collecting sinking organic material. As no weather improvement was forecasted, we headed straight to the next station at 22°S. At these stations laying at the shelf edge to slope we expected to catch krill and mesopelagic fish. By means of several RMT-hauls we could extend significantly our collection of krill and mesopelagic fish species.



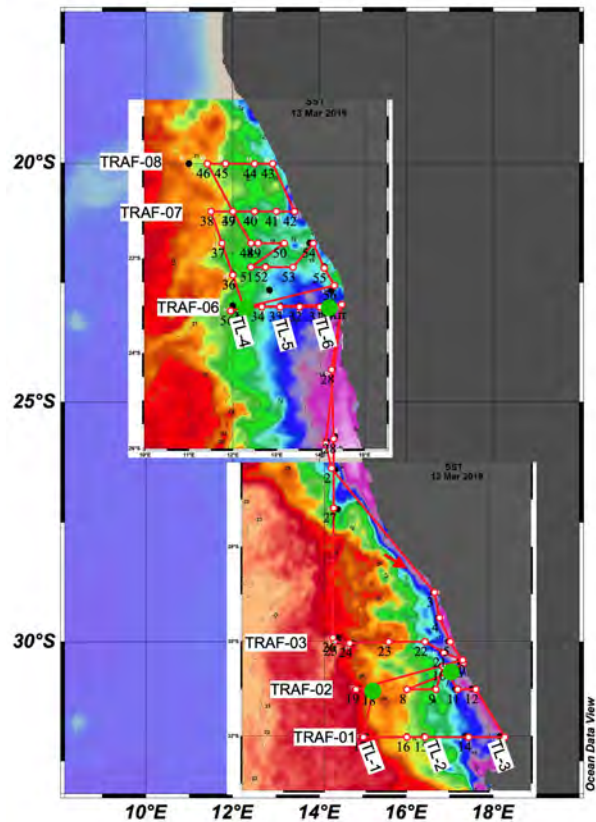


We also encountered high abundances of jelly fish. The amount was much higher in Namibian than we found in South African waters. This forced us to just skip some multinet casts at the nearshore stations.

The last plankton stations that we performed were directly inshore at water depths of 40 to 70 m. At this alongshore transect we towed the TRIAXUS from station 54 to 56 only interrupted by some CTD and plankton net work at station 55 and 56. Having covered the area now with extensive net sampling we finished the plankton work by performing a transect with TRIAXUS perpendicular to the coast, originating at station 56 and extending about 270 nm offshore.

On 14 March we deployed the second deep water sediment trap in the north. The mooring comprised a length of 1600 m and was fixed by means of three iron wheels of railway coaches at 1900 m water depth. Deployment of this sediment trap was the last action of this cruise leg in the northern Benguela upwelling area. After finishing the deployment RV Meteor headed towards Walvis Bay where we arrived on 15 March in the morning to take the pilot onboard.

After some logistics such as packing the containers, sending off frozen samples and disembarking scientific crew members we could continue our voyage on 16 March in the morning and left Walvis Bay at 10:00 local time. On our way to Mindelo we will carry on collecting some data and samples by deploying CTD, multinet and Neuston catamaran as well as using the underway systems to measure CO₂ and running the EK80 for acoustic measurements.



Wasseroberflächentemperatur im Untersuchungsgebiet nach Daten von NOAA, aufbereitet von Tarron Lamont, DEA, Kapstadt

With best regards from 19° S/10° E

Werner Ekau and all remaining cruise participants

