



M188

Walvis Bay - Walvis Bay
March 7 - April 13, 2023

Weekly Report No. 5
(April 3 - April 9, 2023)



At the beginning of this week we were able to recover the second of our long-term moorings on Monday morning. As with the first mooring on the previous Friday, the weather conditions were also ideal this time, calm seas and almost no wind. The top float was sighted shortly after release and the nearly 5000 m long mooring with over 30 instruments, plus two additional sediment traps, was brought on board in just over 4 hours. Following this, we recovered the last two Inverted Echo Sounders on Monday evening and Tuesday morning. With the exception of three lost temperature loggers, all instruments deployed on SONNE cruise SO283 in April 2021 have thus been successfully recovered.

On Tuesday afternoon, we deployed the remaining 28 surface drifters in a square with 10 km sides. Evenly spaced, with ship and inflatable boat, 8 triplets were deployed along the edges of the square and four more drifters right in the middle.

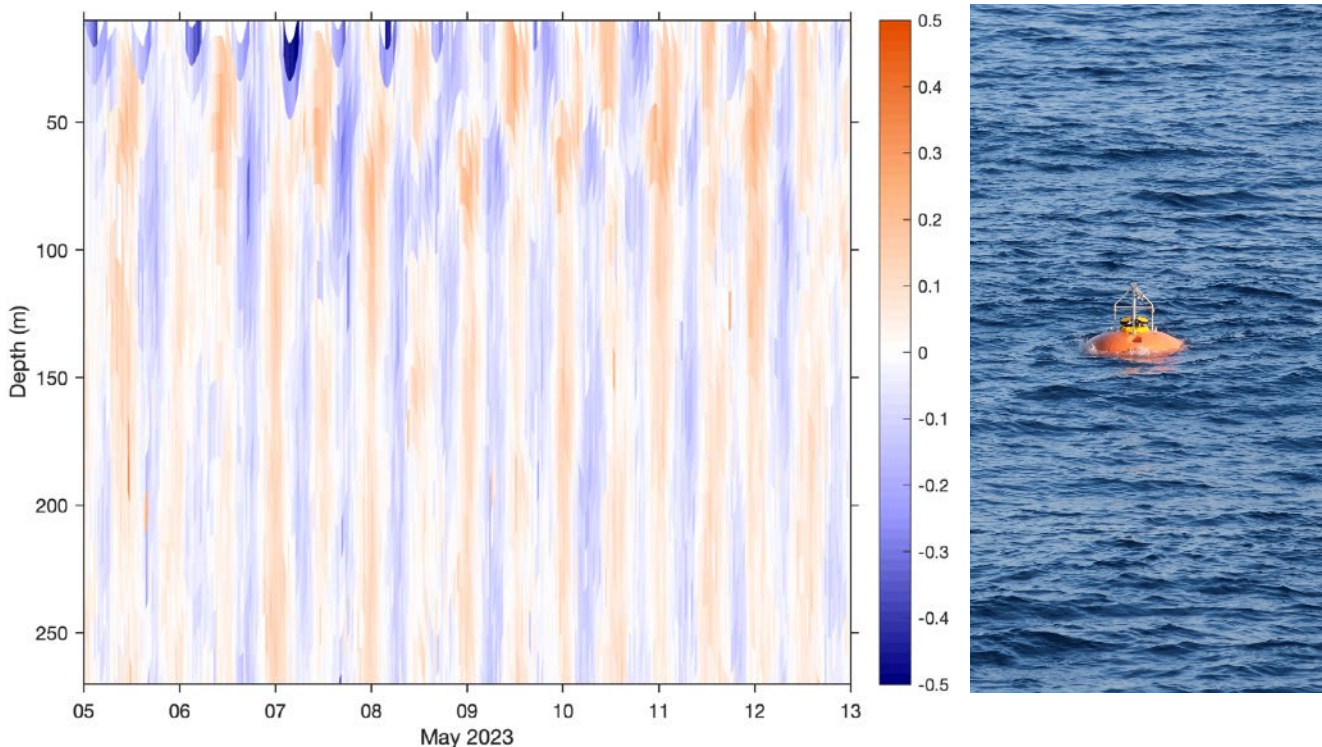


Fig. 1: Short example of the nearly two-year time series of velocity measurements (in meters per second) in the upper 250 m of our mooring recovered on Monday. The regular pattern arises from a superposition of internal tides and inertial waves. The data were obtained with an acoustic Doppler profiler current meter (photo right).



Fig. 2: Deployment of a surface drifter (left) and recovery a glider (right), both in ideal weather conditions from an inflatable boat (photos: L. Aschenbeck).

On early Wednesday morning, after a longer transit, we arrived at the position for recovery of the two gliders that had been deployed on March 25. The day first started with a time series station of microstructure measurements near the surface to observe the diurnal variation of turbulence in and below the surface mixed layer. The two gliders were then recovered easily in the afternoon and the microstructure time series was then continued into the late evening. Both gliders performed well and measured throughout their missions.

After a long transect with the underway-CTD we reached our last time series stations, where we then spent the Easter days. The end of the scientific measurements on Easter Monday was celebrated in the evening with a barbecue on deck, a nice conclusion for the successful work of the past weeks. We now have two days of transit to Walvis Bay ahead of us. Already now we would like to thank Captain Rainer Hammacher and the whole crew of the METEOR for the good cooperation during this cruise. Despite the restrictions that we had, we were able to do a lot of work and go home with a valuable and interesting data set.

Best wishes from the scientific party of M188 to all families, friends, and colleagues on shore.

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