

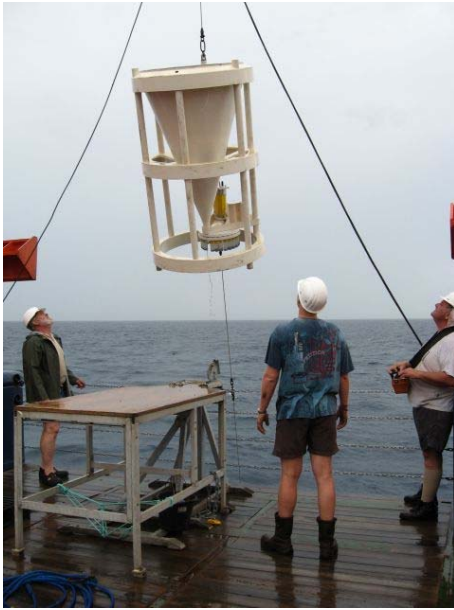
Wochenbericht M75-1b, la Reunion – Dar es Salaam

27 January 2008

Transit to the narrowest part of the Mozambique Channel, where our mooring array is placed over the entire cross-section, continued until Wednesday late afternoon when we arrived on the Madagascar site of the section. After 22 months of observations the first mooring came smoothly to the surface after releasing. During transit much attention had been paid to the way of operating, since both the design and the wires used differ between the German and Dutch habits. Moreover, our moorings are taken out from the stern of the vessel and not from the side as is the habit on the Meteor. A film from mooring operations during previous cruises was shown and used to discuss the way of operating with the Meteor. These preparations clearly paid off during the actual operations. Everything went very smoothly, not only with this first mooring but also with the seven others that were taken out on Thursday and Friday during daylight. We have never taken out so many moorings in such a short time period. A major reason was that all acoustic releases reacted immediately upon receiving the 'release' command. The results are extremely good, all 9 ADCP's functioned 100 %, 19 out of 20 temperature-salinity sensors worked well and only 3 out of 17 current meters did not function during the entire period. Also both sediment traps had functioned excellently. All in all we have an extremely good dataset for the last 22 months. A first inspection of the data shows that the current field is dominated by southward migrating eddies. However, compared to previous years, there seems to be a strong seasonal signal in that during the southern hemisphere winter period these eddies are much stronger than during the summer period.



The top of current meter mooring is taken out. Inside the float an ADCP (Acoustic Doppler Current Profiler) is installed



A sediment trap is placed on deck. Below the trap filled cups are visible.

During nighttime samples from the seafloor were taken with a multicorer and the CTD-frame with bottles was used to obtain additional information on parameters from the water column. Thus far, only a few CTD and Multicore stations were taken since the focus was completely on the mooring operations. This was done because the meteorologist on board predicted the development of a tropical storm in the northern part of Mozambique Channel by the end of the week. If so, the Meteor had to finish the operations along the section. Knowing this, we concentrated on the first priority of our work: recovery of the moorings, servicing the instruments and redeployment. On Friday it became clear that the predictions from the meteorologist, Christian, were perfect: we had to move out of the region during the course of Saturday. Knowing this, and not knowing how long our 'period of sheltering' would take, we decided to start redeployment of the moorings on Saturday morning. Two could be finished before we went in a southwest direction at 2 pm. Now, on Sunday evening, we are some 200 miles away from the mooring section waiting for the passage of the tropical storm FAME (that is the name she officially got on Saturday). The track of the storm seems to follow the predictions. This means that FAME moves along the Madagascar site of the channel, a few hundred km's away from us. The weather conditions near the Meteor are fine, cloudy: some rain, and wind about 4-5 Bft.



Dark clouds behind the Meteor showing the presence of FAME just before the Meteor sailed southwards.

On Monday early in the morning the Meteor will start sailing back to the research area. We hope to be able to start our work on Tuesday, early in the morning. If you want to be informed daily on this cruise, you can have a look at the cruise diary that is presented on the NIOZ website ([www.nioz.nl\M75_1b](http://www.nioz.nl/M75_1b)).

Best regards,

Herman Ridderinkhof

Fahrtleiter FS Meteor M75-1b