

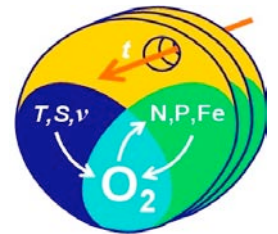


OSTRE IV

M116

(01/05/2015 – 03/06/2015)

1st weekly report, 3 May 2015



SFB 754

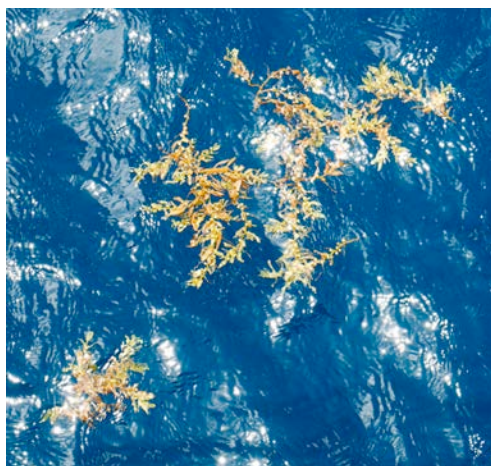
On Friday May 1st, 9:00 am we left the port of Pointe-a-Pitre in Guadeloupe. This was the start of Meteor cruise M116, part of the Sonderforschungsbereich 754 on the interaction of biogeochemistry and climate in the tropical ocean. The spatial and temporal variability of the oxygen minimum zone in the North Atlantic will be observed using shipboard measurements, float and glider data, as well as moorings. The



METEOR at the pier in Pointe-a-Pitre

main goal of M116 is the measurement of a tracer (a non-toxic marker substance) that was injected in the oxygen minimum zone back in December 2012. The distribution of the tracer over the last 30 months holds information on ocean circulation and mixing of water masses through turbulence and eddies. The results of this study, together

with model data will improve the understanding of current and future trends in the tropical oxygen minimum zones.



Sargassum algae are our constant companion.

On board are physical, chemical and biological oceanographers from Kiel, as well as two colleagues from Dalhousie University in Canada, scientists from University Heidelberg, MPI Hamburg and the Cape Verdes and an observer from Senegal. We are a well balanced group of 14 women and 13 men.

We are using the first two days to set up the laboratories, test all instruments and work on the underway measurement systems, using pumped surface seawater. Tomorrow, we will arrive at the first survey area and head east along 11°N. Yesterday the new colleagues were trained using the CTD and several water sampling methods during a test station.



Safety First! Safety drill during windy subtropical weather.

The weather is subtropically sunny and the mood on board is good, the food is excellent and, as always, captain and crew are extremely helpful.

Best wishes from 13° north and 54° west,

Martin Visbeck and scientific party of Meteor cruise M116