

## M130, Mindelo – Recife

August 28<sup>th</sup> to October 3<sup>rd</sup>, 2016

### 6<sup>th</sup> Weekly Report, October 2<sup>nd</sup>, 2016

Since completing the station work Saturday afternoon, we are steaming toward Recife where we will enter the port Monday morning. The measurement program along the 5°S section was successfully completed. As we finished the mooring work at 11°S in less time than expected, the extra time left was used to extend the 5°S section farther offshore by three CTD stations. In combination with the mooring and section data at 11°S, a new data set is now available describing the variability and change of the western boundary circulation off Brazil that will contribute to understanding its impact on climate variability in the North Atlantic sector.



Abb. 1: Gruppenbild der wissenschaftlichen Teilnehmer von M130.

In a concluding seminar held today the results of the preliminary data processing was discussed. Amongst other things, it reminded us of the diversity of the physical, chemical and biological parameters collected during the measurement program. During the talks, it also became obvious that often distributions of the interdisciplinary parameters are connected to each other. For example, a subsurface anticyclonic eddy with a low oxygen core that we sampled at 13°N on 23°W was connected to elevated abundance of cyanobacteria at the sea surface and an elevated abundance of particles in center of the eddy. A large number of particularly the biological

parameters will be determined in the laboratories at home. The interdisciplinary discussions will then be continued.

A successful but also very work-intensive research cruise has nearly come to completion. We are grateful to Capitan Schubert and his crew for the excellent collaboration and the pleasant working atmosphere during the cruise. The crew of FS METEOR greatly contributed to the success of the cruise. Likewise, I am grateful to the dedication and commitment of the scientists and technical staff who equally contributed to the success of this cruise.

Best regards from the tropical south Atlantic,

Marcus Dengler and the participants of M130