

**RV METEOR - M181 - "TRATLEQ2"**

17.04. - 28.05.2022, Cape Town - Mindelo

**1<sup>st</sup> Weekly Report** (15. - 17.04.2022)

With the departure of the German research vessel METEOR on Easter Sunday, April 17th, 2022, from the port of Cape Town, South Africa, the second research cruise began under the direction of the GEOMAR Helmholtz Centre for Ocean Research Kiel, which is dedicated to the investigation of physical, biogeochemical and biological processes in tropical upwelling areas with a particular measurement program along the equator. This topic is also the namesake of our cruise: Trans-Atlantic Equatorial cruise 2 (TRATLEQ2). The first cruise (TRATLEQ1) covering the whole equator from Africa to Brazil was successfully carried out in September/October 2019 before the Corona Pandemic. Both trips together will record the seasonal changes in the upwelling areas off Angola and at the equator. The research work is carried out in particular within the framework of the EU project TRIATLAS, in which the state and development of the marine ecosystems in the tropical and South Atlantic are studied. As part of this project, work on the physical drivers of increased biological production in upwelling areas, the role of phytoplankton, zooplankton and particle distribution for carbon export to the deep sea and the quantification of nitrogen fixation by biological processes will be carried out.

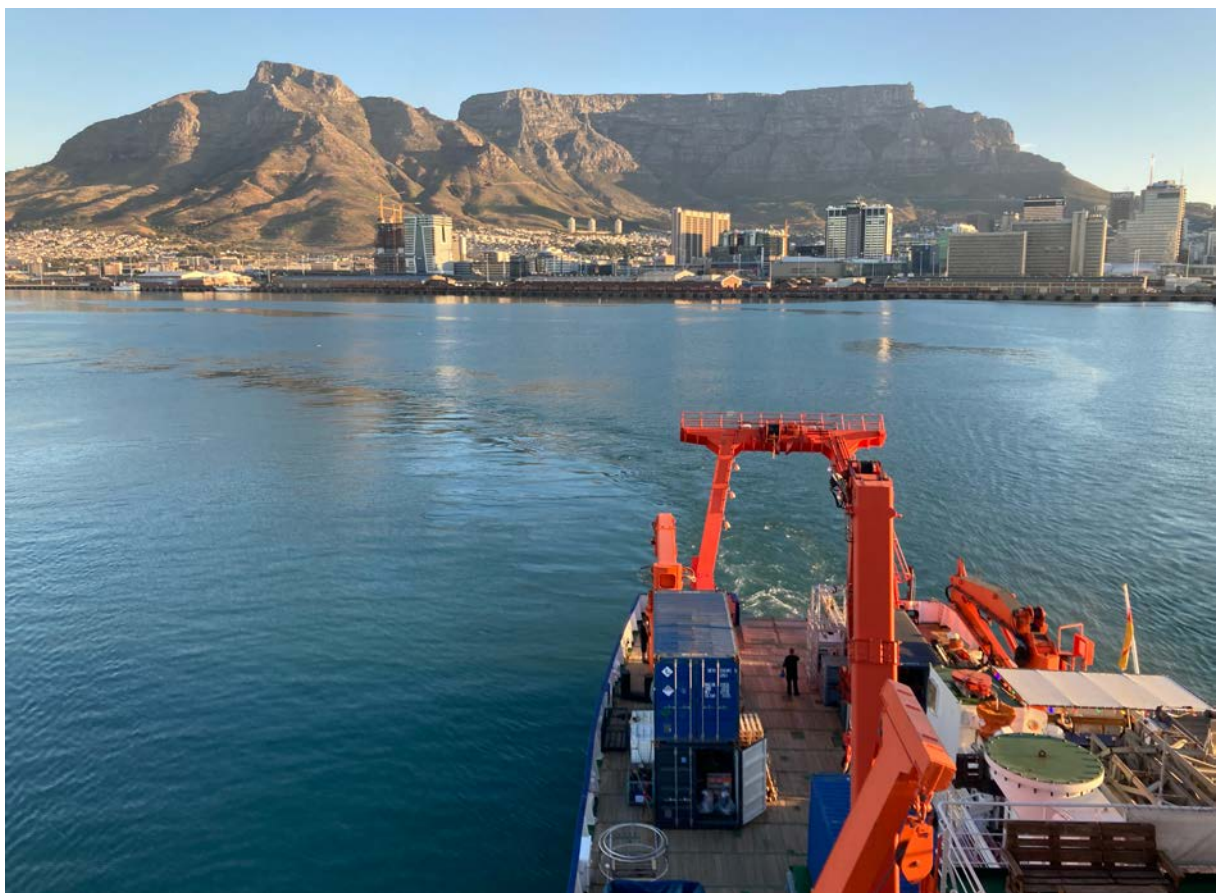
After much uncertainty in the run-up to the research cruise regarding the effects of the Corona Pandemic, we are pleased to announce that all cruise participants tested negative before departure, started their journey to Cape Town and also arrived onboard METEOR. Here in Cape Town, we were greeted with perfect weather and an anchorage of the METEOR right in front of the impressive backdrop of the Table Mountain. Unfortunately, the Corona measures did not allow us to visit the city or the unique surroundings.

Due to the arrival of all participants on the embarkation day (Easter Saturday), there was not much time to inspect our research equipment, which was delivered to Cape Town by ship or plane, and to check that it was complete. However, our containers with equipment were already on board when we arrived and only had to be unloaded. With only a slight delay due to other material delivery, METEOR was able to leave the port of Cape Town on Easter Sunday at around 6:00 p.m. in the direction of our first working area off Angola.

Greetings from the tropics and the cruise participants of M181,  
Peter Brandt  
(GEOMAR Helmholtz Centre for Ocean Research Kiel)



**Fig. 1:** RV METEOR at the anchorage in front of the Table Mountain (Photo: Peter Brandt).



**Fig. 2:** Departure of RV METEOR from the port of Cape Town, South Africa (Photo: Peter Brandt).