

Finally, on 22 January at 13.00 POLARSTERN left the pier with some delay. Because of bad weather some days before, 3 freight containers had to be deviated to Durban and we had to wait until they arrived by truck in Cape Town. Now, the city of Cape Town and the Table Mountain lie in the burning subtropical sun and provide ample possibilities to the 57 cruise participants to bid fare-well to the sight of land and cities.

During the next weeks water and sky will dominate the horizon until we will reach the Antarctic coast where ice will be the overwhelming feature. During the southern hemispheric summer, the ice zone retreats in the area of our operations back to the coast, so patience is needed. However, there is not much time to dwell on farewell feelings, since work has to be done to be prepared for the research projects. The labs have to be arranged, instruments have to be installed and put in service and the lab containers have to be adapted to the needs of the present work. Everybody wishes to finish his or her preparations fast because one never knows when the good weather will be over and installation is much more difficult if the ship is moving in the waves.

The variety of the work planned by cruise participants from 30 institutions in 10 countries is reflected in the amount of material, which is needed. The crew is performing miracles in keeping on unloading containers with having barely space to put things on deck. In the turmoil of people searching and carrying away their goods there somehow is still enough space to move material from the second story of the container load with the forklift truck down to the deck. We are lucky and weather stays good so that we are able to finish unloading and installation under optimal conditions.

The cruise is dedicated to two large fields of research: deep-sea biology in the frame of the ANDEEP III programme and physical/chemical oceanography in the WECCON 2005 project.

The first in action are the physical oceanographers. They start their measurements still on the shelf with recording near surface temperature and salinity with thermosalinograph and ocean currents with the ADCP (Acoustic Doppler current profiler). Over the continental slope measurements of vertical profiles of temperatures to a depth of 700 m start with the XBTs (Expendable Bathythermograph) from the moving vessel. Every two hours an XBT is launched by the oceanographers.

In the early hours of Tuesday the first biology station in the Cape Basin is reached. After a profile of temperature and salinity with the CTD (Conductivity, Temperature, Depth) and the water sampler, the sediment profile imaging J system (SPI) is lowered to 4700 m to provide slides and videos from the sea floor and even from within it. However, the first trial is not very successful. But at its second chance the SPI brings interesting views to the surface. The box corer as well needs a second trial to provide the

expected sediment sample. The station continues with multicorer, epibenthic sledge and Agassiz trawl. At the end of the station a pressure inverted echosounder (PIES) is deployed by the oceanographers. It will stay on the sea floor for two or three years and measure water properties and sea level elevation. Only after the recovery of the instrument, the data will become available.

From time to time, the ship has to slow down on its course to the southwest to deploy vertically profiling floats. They contribute to the global Argos system. In the meantime a second biology station could be done successfully southwest of the Meteor Rise. A first PIES was recovered very comfortably by using the helicopter to release it before POLARSTERN arrived at the position so that we could pick it up without further delay. This time the Roaring Forties were very friendly to us but in the days ahead, the fifties are waiting for us with a somewhat less pleasant perspective.

With the best regards from all on board
Eberhard Fahrback