ANT XXIII/5 Weekly Report No. 3 (Punta Arenas - Cape Town) 24 April - 30 April 2006

At the beginning of the week we slowly approached our target area. Most of the scientist needed a lot of patience during the long transit as most are used to scientific work starting a few days after an expedition has begun. After 12 days of transit we arrived at the first sampling location on April 26th. It is a submarine volcano, which has not been active for at least 20 Myr. After a short bathymetric survey it became clear that the slope of the seamount was not steep enough for a successful dredge. This is also true of the next two proposed positions. The seafloor topography in this region is poorly known. We use mainly topographic maps, which were produced from satellite measurements of the earth gravity field. Although these measurements provide an excellent overview, they are not detailed enough to provide good information on the slope dip. Exact depth measurements on the spot are still needed to obtain sufficiently detailed information.

Finally, in the evening of April 26th a suitable dredge location was identified at 50°S/5°E. The dredge was very successful. Several hundred kilograms of rocks were on the deck after several hours of operation - a good start. At the next dredge location we were all surprised. The weather is not very rough, but the sea showed a long wave swell. During the turning of the vessel for a bathymetric survey, the swell was extraordinary and the ship began to roll strongly. All of us were reminded within less than 2 minutes that we are on a vessel- very little remained in it's originally position.

During the rest of the week we continued the dredge programme with variable success, but achieving a good result overall. On April 29th, around noon, the scientific work in this research area was finished and the ship headed north, towards the new target area.

At the beginning of the week we had real autumn weather, bad visibility, fog and partial rain. It is now improving towards the weekend. From Tuesday onwards the visibility became good enough for the geophysists to start their magnetic helicopter programme. At the end of the week all the meteorological information we received clearly showed that the ship would be hit by a very strong storm if we did not change our course: we did so immediately.

Our biologists were less affected by these weather problems. After they finished their research programme they disappeared into their cooling container, deep down in the ship conducting some experiments with the zooplankton.

With kind regards on behalf of all cruise participants,

Wilfried Jokat und Holger Auel 30. April 2006, Position 44°00'S 008°00'E, +10°C