

**THE BATHYMETRY OF THE SOUTHERN OCEAN - STATUS REPORT 2006 -**

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The sea floor topography of the Southern Ocean surrounding Antarctica is still widely unknown. This ocean presently contains, due to continuous ice-coverage, "white spots", which describes areas without any knowledge about form and structure of the seafloor. However, the survey activities of modern ice-breaking research vessels during the last decades using multibeam systems have significantly increased the data-base, which will result in a compilation of a new bathymetric chart around Antarctica, the International Bathymetric Chart of the Southern Ocean (IBCSO).

The availability of bathymetric information as a Digital Terrain Model (DTM) or as a digital map with contour lines is vital for many marine scientific disciplines. For instance, detailed physiographic descriptions of the seafloor can provide contemporary and historical indicators of sea level change, of constraints to ocean circulation, and of processes associated with glaciation, sedimentation, and tectonic activity.

To date compilations of bathymetric charts based upon random tracks have been performed in the Indian Ocean, in the region of the Weddell Sea, and in the area of the Ross Sea. Nevertheless, in the Pacific sector of Antarctica our bathymetric knowledge is poor and fragmentary. Only few bathymetric survey lines are available in this region. Data from late expedition in this region will be presented.

The actual status of the IBCSO development including the coast line and the land topography will be presented and discussed. An inventory of the existing sonar data (multibeam and single beam) around Antarctica will be presented at the meeting including a data quality assessment. The strategy for the map compilation and the layout of the first edition of the IBCSO shall be presented.