

NEW DIGITAL 1:500,000 ENVIRONMENTAL GEOLOGY MAPS OF THE BALTIC SEA

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The natural phenomena of bottom topography and recent sedimentation of the Baltic Sea are exposed on the newest Bathymetric Map and Bottom Sediment Map of the Central Baltic Sea. The maps on a scale 1:500 000 are constructed in an ARC/INFO™ format and published in 1999. This work is conducted as a joint Lithuanian-Swedish GEOBALT Programme granted by the Geological Survey of Lithuania, the Swedish Maritime Administration and the Geological Survey of Sweden.

The Bathymetric Map demonstrates better than previous published maps the morphology of the recent bottom topography, mainly formed by glacial processes affected by postglacial and recent sedimentation as well as morphodynamical processes. Depth contours are drawn by every 5 or 10m. The map shows several new details of the bottom morphology, e.g. in the Landsort Deep, the Landsort and Norrköping depressions, the Piltene depression off Ventspils, the Fårö depression. Some new geographical features has been named, e.g. the South Klints Bank (105m). An insert map shows a 3D spatial plan of the Central Baltic bottom topography.

The Bottom Sediment Map presents the lithological types of surficial sediments (0-5cm). The various grain size distribution of the clastic sediments is displayed by colours and, in order to facilitate reading, single figures referring to the legend are given in each coloured field. Features as hatches and dots highlight the lithology of the bottom sediments. A correlation is made between the two sediment classification systems of the Sweden and Baltic countries.