MAPPING OF MARINE DATA

by

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ABSTRACT

In the last 7-8 years the Institute of Marine Research has developed and exchanged computer routines with other research institutes, building up effcient tools for computer presentation of marine data. The routines are written in FORTRAN-77 on a 32-bit ND-500 computer and most of the package could easily be transported to other computers supporting that language. The package has five modules.

ReadTopography, reads cartographic data as geographical coordinates for different depth levels from magnetic tape.

LinkLines. The coastlines delivered from different sources are often discontinous and with data for a specific area scattered around in the database. LinkLines assures that data for one topographical level are stored contigous and that faulty jumps are removed. An island will then always be a closed polygon.

MakeMapBase, creates a hierarcical datastructure that are easy to access and gives fast retrieval of geographical data in a specific area.

MapLibrary, is a FORTRAN library for drawing of topographical data, chartframes, text, courselines, symbols, isolines etc. Maps may be drawn in five different projections and isolines are never allowed to go "ashore". Routines are also included to draw sections.

ITAKS, is an interactive program with hierarchical windows and easy to understand leading texts, on-line help and error messages that makes it easy for an enduser to produce maps and sections on various plotting media.