## The Mud Area Southeast of Helgoland: A Reflection Seismic Study

by

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## **Abstract**

In the Middle Miocene, two halotectonic depressions were formed in the German Bight. While the western depression, Helgoland Hole, still exists more or less intact today, the Eastern Depression persisted as a palimpsest structure only through the Pleistocene into the Early Holocene. About 8,000 years B.P., as sea level rose to about -40 m, a small embayment formed east and southeast of Helgoland. It was bounded to the north by the Steingrund ridge which stretched from Eiderstedt Peninsula to the Helgoland platform, so that water circulation in the north-south direction was highly restricted. The Elbe and Weser were deflected to the west to deposit their suspended material and bed load in the Eastern Depression. Before

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