

Geophysical Studies near the Ascension Transform: Evolution of Ridge Segmentation and Crustal Structure - Auswertung

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In late 2004 Meteor cruise M62/4 collected a large geophysical dataset in the region of the Ascension Transform fault with the aim of studying the segmentation of the spreading axis. The dataset consisted of four long wide-angle profiles, two grids of shorter wide-angle profiles suitable for tomographic analysis, two microseismicity datasets, a deep-tow seismic reflection survey, magnetic, bathymetric and continual gravity measurements. Specific questions to be addressed using these data are: the change in crustal and upper mantle structure moving from the centre of a spreading segment towards the end and between spreading segments with a well-developed median valley and a well-developed axial high; the asymmetry between segment ends adjacent to the active transform and the inactive