

GEOMAGNETIC INVESTIGATIONS OF THE INDIAN OCEAN

(abstract)

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Up to the end of fifties of the 20 century Indian Ocean represented it-self the least studied area of the World Ocean from geology-geophysical point of view. Intensive investigations of the last decades of the twentieth have allowed to receive a fair quantity of the geological-geophysical information on a history and development of different structures of a bottom of the ocean testify that linear magnetic anomalies are disjointed on related to the mod-ern rifts and not reducible to them.

This circumstance allows us to establish for Indian Ocean three systems of linear magnetic anomalies. The linear magnetic anomalies belonged to the first system, formed in the rift zones existing up to now. Linear magnetic anomalies of the second system generated in the rift zones stopping the existence in Cenozoic time. Linear magnetic anomalies of the third system generated in the rift zones stopping the existence in Mesozoic time.

As a result of identification of linear magnetic anomalies the new scheme of chrons for Indian ocean is constructed. On its basis the new absolute paleogeodynamic reconstructions have been conducted for chrons $\hat{U}5$ (10 my), $\hat{U}6$ (20 my), $\hat{U}13$ (33 my), $\hat{U}24$ (52 my), $\hat{U}28$ (62 my), $\hat{U}31$ (67 my).

In their turn reconstructions have allowed to reveal features of migration of regular spreading in time and space from Macquarie triple junction to Rodriguez triple junction and far to Bab al Mandeb pass in the western Gulf of Aden.