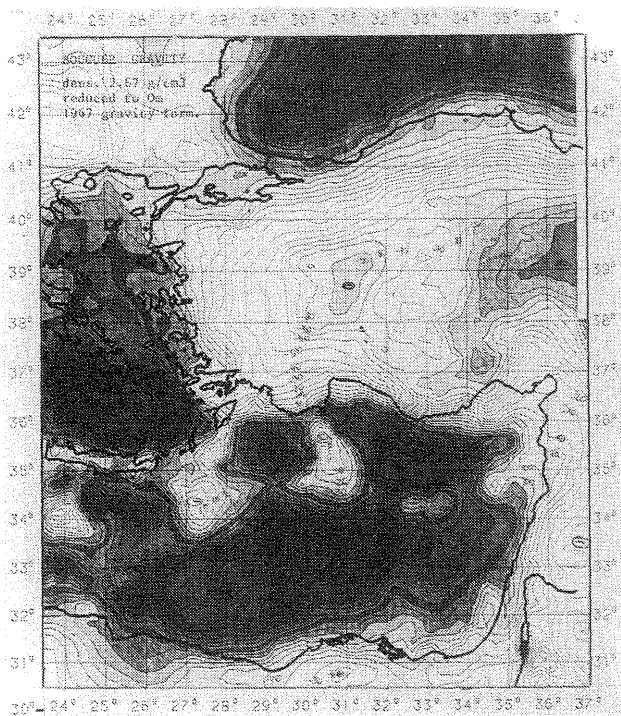


## Geophysical Studies and Tectonics of the Eastern Mediterranean Sea

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By reevaluating all available geophysical information for the Eastern Mediterranean Sea new Bouguer gravity and total magnetic maps were compiled. Previously the gravity and magnetic fields of the region had never been resolved with sufficient accuracy to permit reliable quantitative evaluation.



The thickness of the Eastern Mediterranean Rise ranges from 28 to 34 Km. Its sedimentary cover is about 10 Km thick. The borders of the Eastern Mediterranean Sea are built up of thick continental crust. Tectonically the northern borders of the Eastern Mediterranean Sea are built up of active continental margins defined by the Calabrian, Hellenic and Cyprus- Antalya Arcs, whereas the southern border represents a passive continental margin formed by stretching and subsequent subsidence.

Using the newly compiled maps, new crustal models were calculated; the results and implications are presented and discussed.