



2D Gravity Data Modelling of the Black Sea

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The aim of this study is to determine geological structure beneath the Black Sea by using gravity data. For this purpose, three separate gravity profiles, which will define the basic tectonic structures, were taken on the gravity map of the region.

2D Gravity inversion method was performed on all these three gravity profiles. Consequences obtained from gravity inversion were compared with results of seismic reflection and gravity studies which were formerly investigated. For the inversion applications, the input gravity model were defined by using the density values which were collected from the previous gravity studies.

According to the inversion results, sedimentary rocks go down to 10–12 km under both the Eastern Black Sea and the Western Black Sea Basin. Depth of sedimentary basin under the Central Black Sea is about 8 km.