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Contribution of Satellite Altimetry Data in the Environmental Geophysical Investigation of the Northern Egyptian Continental Margin

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ABSTRACT

The northern Egyptian continental margin is characterized by interesting tectonic settings as well as trade and industry district in Egypt. In the current study, the contribution role of satellite altimetry gravity data in the Environmental geophysical investigation is presented to give a complete view of the marine gravity field of the study area. The satellite data showed only minor deviations in some partial regions of the area investigated such as Nile Deep Sea Fan, Levant Basin, Eratosthenes Seamount and Herodotus basin. The interpretations of the entire data illustrated that the differences between the satellite and the shipboard data were small in some regions particularly near to land. Furthermore, a number of strong deviations in some regions were spatially correlated with bathymetric depth together with the appearance of geological structures.

KEYWORDS

Northern Egyptian Continental Margin; Satellite Altimetry Data; Free-Air Gravity

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