



## **Geophysical and seismo-tectonic evolution in Dahshure area, SW Cairo-Egypt**

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The study of seismic hazard assessment around greater Cairo-Egypt is very important due to condense population (more than 20 million) in that area. Although, Egypt is characterized by low seismic activity. The seismotectonic zones and high activity are occurred along the Gulf of Aqaba–Dead Sea transform, the Northern Red Sea triple junction point, Aswan, Dahshur, and Cairo-Suez District . In this study, earthquake catalogue (up to 2015) of all seismo-tectonic zones in Egypt and its surroundings are used.

Beside the seismicity analysis, gravity and magnetic maps of Dahshur area are analyses for tracing active subsurface faults that are responsible of earthquakes activity. The surface geology and subsurface faults are used to evaluate the tectonic framework in the area under study. Also, The seismicity maps, focal depths and seismic hazards values are calculated.

Keyword: Seismo-tectonic, seismic hazards assessment, potential fields, Greater Cairo-Egypt