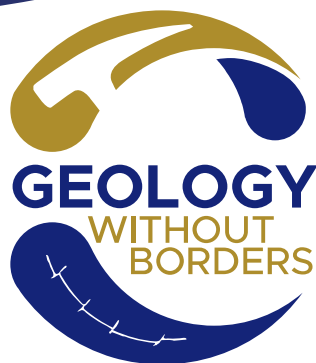




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# ABSTRACT BOOK

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## 90° Congresso della Società Geologica Italiana



## **A geomorphological study of graben structures offshore the Maltese Archipelago with characterisation of associated physical habitats**

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The submarine realm represents more than 70% of the Earth, but its majority has yet to be mapped and studied. The Seabed 2030 initiative is the key long-term international project with a mandate to map the entire ocean floor. If we focus on the Mediterranean Sea, several areas have not been investigated yet. Among them, the areas around the Maltese Archipelago, in the central Mediterranean, have been poorly investigated, representing quite an important geographical and geomorphological gap in knowledge. The Life BaHAR for N2K project, commenced in 2013 and concluded in 2018, was oriented on extending already existing marine Sites of Community Importance (SCIs), if necessary, and designating new marine areas as SCIs within Malta's waters to form part of the Natura 2000 network. Thanks to the data collected within this project, I was able to perform a geomorphological study over a portion of the Malta Graben System. The study area covers part of the north-west seafloor offshore Gozo, and a larger portion of the south-west bottom offshore the Maltese Islands. In particular, three specific areas have been investigated: Area 1, along the northern margin of the Malta Graben; Area 2, covering part of the southern margin of the Malta Graben; and Area 3, which is NW of Gozo in the proximity of the North Gozo Graben. The main goal of this project has been the identification of the main morphological features, and associated driving processes, present in the area to provide a geomorphological characterisation of this part of the Malta Graben System. In addition, I focused on the identification of those areas which deserve a special attention as hypothetically associated to sensitive habitats.