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Geosite inventory and quantitative assessment in southern Malta (Central Mediterranean Sea)

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The Island of Malta is characterized by a great variety of landscapes and landforms, including a wide range of features with great geological and geomorphological interest. The inventory and assessment of geosites can contribute to the preservation, protection, and promotion of this rich geodiversity. Furthermore, geosites hold considerable potential to attract geotourists, thereby contributing to local economic development. Tourism direct contribution to national GDP is one the highest among European countries, thus tourism plays for the Maltese Islands. Despite this, geotourism remains an underexplored resource, yet it has the potential to play a significant role in the local economy. This study aims to highlight the role of geoheritage and geotourism as resources for advancing sustainable tourism and geoconservation in the southern sector of Malta. This area presents significant opportunities for geotourism development. The study involved the inventory and quantitative assessment of potential geosites using widely recognized methodologies tailored to the local context. The analysis identified 18 potential geosites that can be recognized as both part of the Maltese natural heritage and tourist resources. Among these, four key geosites were identified as priorities for inclusion in a potential geotourism route, which also integrates nearby cultural heritage features. Additionally, the assessment methodology — applied for the first time in the investigated area — has proven to be a valuable support for geosite identification and can be extended to other Maltese sectors.