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ABSTRACTS



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LITHO- AND BIOSTRATIGRAPHY: A KEY TO INTERPRET THE PALEOENVIRONMENT. THE CASE OF MESSINIA BASIN (GREECE)

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The post-alpine sediments at the eastern margin of the Southern Messinia basin overlie unconformably the alpine ones. Their deposition took place over an already wellformed erosional paleorelief.

Based on sedimentological and stratigraphic criteria, the above mentioned post-alpine sediments may be distinguished into:

- a. Marine Pliocene Pleistocene sediments, which include:
 - i. The Thouria Asprochoma formation, that is attributed to a shallow-water depositional paleoenvironment, distal to the coast.
 - ii. The Aghios Georgios formation, that is attributed to a shallow-water depositional paleoenvironment, proximal to the coast.
 - iii. The Skopeftirion and Velanidia formations, that are attributed to an alluvial fan depositional paleoenvironment.
- b. Continental Pleistocene deposits, which include:
 - i. The Red-Siliceous Detrital formation, which is attributed to the *in situ*, or not, weathering of the oligomictic or polymictic marine conglomerates.
 - Monomictic scree and fans, whose deposition is mostly controlled by tectonism.
- c. Continental Holocene deposits, which include fluviatile, swamp and coastal deposits.

The Pleistocene age assignment on some of the above-mentioned sediments is based on the presence of *Hyalinea balthica* (SCHROETER) and *Globorotalia truncatulinoides* (D'ORBIGNY).

Based on the litho- and biostratigraphy of the sediments, it is evident that the eastern part of the Southern Messinia area had been submerged until the end of the Middle Pleistocene.

Since then the area is under uplifting regime. Climate and tectonism, however, have now become the main morphogenetic factors. Nevertheless, tectonism is the main factor of morphogenesis in the area after the Middle Pleistocene.