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Psematismenos-Maroni Basin in Cyprus: geomorphology and biostratigraphic contributions to its Tertiary geodynamic evolution

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The Tertiary regressive sedimentary succession which forms the sedimentary cover of the Troodos Ophiolic Massif has been studied in the Psematismenos-Maroni Basin (PMB) located in southern Cyprus. Identification of key surfaces, morphologies, and sedimentary facies permit to propose a new interpretation of the geologic history of this basin. The series of unconformity surfaces are conforted by numerous new datings, and they are related to tectonic, eustatic, and biostratigraphic hiatuses.

This eventually leads to a new geologic vision of the Psematismenos-Maroni Basin from the Neogene Pakhna formation up to the first alluvial deposits of the Quaternary. In the meantime, and for what concerns the Messinian salinity crisis; similarities and differences from the 2008 Messinian consensus (Lofi et al. 2008) are highlighted.