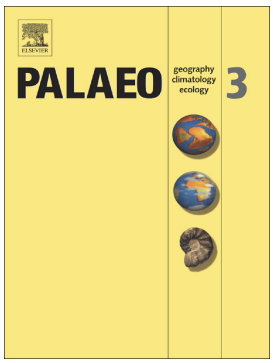

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ABSTRACT

In this study, we examine a 750-m-thick section of lower to middle Miocene sediments penetrated by an exploration well named ARM-36 drilled in the central eastern part of the Gulf of Suez. We used the planktic foraminiferal biostratigraphy of this section to classify these sediments into four previously established planktic foraminiferal biozones: M2, M3, M5, and M6. We then employed benthic foraminifera to describe the paleoenvironmental conditions in the Gulf of Suez and to correlate the results with other successions (e.g., Alpine Foreland Basin, Molasse Basin, Altdorf Section and the Austrian part) in the Central Paratethys. The correlation indicates that similarities exist between the main paleoenvironmental events in the Gulf of Suez and Central Paratethys, even though they were located in different climatic zones and were controlled by different tectonic events. The similarities may be related to global climatic conditions. Consequently, we applied several indices, paleodepth proxies, and multivariate statistics on 316 ditch-samples samples, containing 72 benthic species, to reconstruct the paleoenvironmental conditions during this time interval. Analyses of benthic foraminifera and their ecological preferences indicate that these sediments were deposited in inner shelf to upper slope environments that were characterized by oxic bottom waters and normal marine salinity during the investigated interval.