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ABSTRACT BOOK

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Late Holocene environmental dynamic of the Umm al-Quwain (UAE) lagoon and its implication for the quest for the ancient harbour of Omana

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Along the coastline of the Umm al-Quwain lagoon (United Arab Emirates), the Late Pre-Islamic (LPI; 3rd century BC – 3rd century AD) archaeological site of Ed-Dur (4 km inland from the extant coastline) is believed to be the ancient capital of *Omana/Ommana* mentioned by Pliny the Elder and the anonymous writer of the *Periplus Maris Erythraei* in the 1st century AD. On the contrary, the position of the harbour of ancient *Omana/Ommana* is still a matter of debate because the geomorphological configuration of Umm al-Quwain lagoon hides archaeological evidence of its existence. Remote sensing and fieldwork along the lagoon revealed that the north-eastern shoreline of the island of Akab displays a rectangular feature, likely related to human modification. Therefore, the area was investigated through several trenches, preserving sedimentary evidence for the shift of the sedimentary environment with the progressive migration seaward of the mangrove followed by the formation of a sabkha then covered by sand dunes. This evidence suggests that the sea level was higher than today likely supporting the exploitation of the island as a harbour. Archaeological evidence collected during the archaeological survey of the Island by the writers, as well as by old excavations, confirms the occupation of the island during both the Late Pre-Islamic and the middle Islamic (14th-15th centuries AD) periods. Such human presence could lend further support to the interpretation of Akab island as the locus of an artificially excavated harbour, although its precise date remains unknown. The data collected so far allow the reconstruction of a trade route over the Arabian Peninsula and shed light on the correlation between the mainland and an associated lagoon harbour within the context of the landscape evolution linked to Holocene climate fluctuations and the relative sea-level changes along the lower Persian Gulf.