* Palaeo-environmental evolution of the Kathari-Lichines marine bay (Kition, Larnaca, Chypre)

Guénaëlle Bony 1*, Nicolas Carayon2, Clément Flaix3, Nick Marriner4, Christophe Morhange5

1 Archéologie des sociétés méditerranéennes, UMR CNRS, Lattes, FRANCE
2 Department of Archaeology, University of Southampton; Southampton, UK
3 EcoLab (Laboratoire d’Ecologie Fonctionnelle et Environnement) UMR, Toulouse, FRANCE
4 CNRS; Laboratoire Chrono-Environnement UMR, Besançon, FRANCE
5 CEREGE, UMR CNRS/AMU, Europôle Méditerranéen de l’Arbois, Aix-en-Provence, FRANCE
6 Laboratoire HISOMA, Maison de l’Orient et de la Méditerranée, Lyon, FRANCE

* Email: guena.bony@gmail.com

Sedimentological and palaeoecological analysis and radiocarbon dating of seven cores obtained around Kathari-Lichines, north-west of the Phoenician military harbour of Kition-Bamboula, provide new palaeo-environmental informations for Kition and Larnaca Bay during the past 5000 years. The closure of Kathari Bay and the presence of gypsum on the margins of Bamboula’s Harbour were not caused by tectonic uplift as previously accounted (Morhange et al., 2000) but by a progressive confinement of the bay due to an accumulation of a pebble spit along the Larnaca coast. We found no archaeological nor geomorphological evidence to support major tectonic activity since the foundation of Kition. Siltation has caused coastal changes at different spatial and temporal scales. A similar transition from a marine bay to a lagoon occurred around 4000 yrs cal. BP at the salt lake 2.5 km southeast from Larnaca (Devillers et al., 2015). This metamorphosis was fully set up 2000 years later (2900-2200 yrs cal. BP) in the Bay of Kathari-Lichines. This accumulation of pebbles is consistent with a period of strong detritism at this time in Galias river plain on the north-east of Cyprus (Devillers, 2005). The construction of the pebble spit between 2900 and 2200 yrs cal. BP yielded a protected coastal environment conducive to harbour activities. The discontinuity of the coastal spit, demonstrated by this study, led to natural outlets allowing ships to access the shores of Bamboula (Phoenician military harbour) and Kathari-Lichines. The Phoenician military harbour of Bamboula was therefore founded in the most protected lagoon area and does not correspond to a closed harbour (e.g. a cothon). The Bay of Kathari-Lichenes was also a vast harbor area. Natural docking areas (i.e. beaches) probably existed at the foot of the city wall of Kathari. However, no storage areas or warehouses have been identified. At Kathari many anchors were re-employed in the temple architecture of the Late Bronze Age, but cannot be considered as evidence of harbor activity. By comparison with numerous sites along the Mediterranean, at Kition, high sediment supply was not perceived as an environmental constraint but as a process that yielded new environmental opportunities. The permanence of a natural environment allowing harbour activity was provided through the pebble spit. This contributed to a continuous human occupation of the settlement until today. These environments are presently landlocked and the harbor area lies 500 m to the southeast.