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## Palaeoenvironmental and coastal changes within the context of early Phoenician colonization in the southern Iberian Peninsula

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During the last decade, new chronological data resulted in a re-evaluation of the timing of initial Phoenician colonization in the southern Iberian Peninsula. Against this background, follow-up archaeological studies aimed at improving our understanding of the early contact with the local indigenous population, trading patterns, and knowledge exchange during the time of the first Phoenician colonial settlements. Separated by a distance of only 40 km, and situated in the northwest and northeast of the Strait of Gibraltar (Andalusia, Spain) and thus in a strategically important – yet understudied – area, two of the most important Late Bronze/Early Iron Age settlements in the southwestern Iberian Peninsula, La Silla del Papa (Cádiz) and Los Castillejos de Alcorrín (Málaga), have been subject to archaeological investigations during the recent past. Previous geoscientific studies carried out in the lower Río Guadiaro valley and in the direct vicinity of the Phoenician settlement Montilla some 10 km southwest of Alcorrín during the mid-eighties lacked detail, particularly in terms of chronological resolution. Thus, ongoing geoarchaeological research embedded in a German-French DFG-funded interdisciplinary project ("Archeostraits") aims at (i) deciphering palaeoenvironmental and coastal changes in the surroundings of the two mentioned settlements throughout the mid- to late Holocene; (ii) constraining palaeoenvironmental conditions during early Phoenician colonization; and (iii) better understanding human-environment interactions during the Iron Age.

This study presents first data collected within the framework of the "Archeostraits" project in the surroundings of both the Atlantic (La Silla del Papa) and Mediterranean (Los Castillejos de Alcorrín) areas of research during two field campaigns in 2015. Research permits were granted by the Consejería de Cultura, Junta de Andalucía. The preliminary interpretation of coring transects along the lower Río Guadiaro (Málaga/Cádiz) allows for the differentiation of successive palaeoenvironments and for establishing a local chronostratigraphy for the sedimentary infill of the valley. Based on these results, the deposition of shallow marine sands, overlying pro-deltaic deposits of alternating sand and mud, and the subsequent development of lagoonal conditions in the lower Guadiaro valley took place before the Phoenicians established first colonies along the coast. Vibracorings carried out in the eastern part of the Laguna de La Janda (Cádiz) point to a distinct phase during which fluvial deposition by the Río Almodóvar dominated. These sandy units interrupt two separate periods of fine-grained, limnic to semi-terrestrial sedimentation. Future work will include further chronological investigations as well as microfaunal, pollen and macroplant analyses of suitable sediment cores, potentially allowing for relating our findings to local or even regional palaeoclimatic and sea-level changes.