



## **Late Quaternary stratigraphy of the La Janda Basin (SW Spain) - first results and palaeoenvironmental significance**

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The La Janda basin in southern Spain is a near-shore geo-bio-archive comprising a variable Quaternary depositional history, with shallow marine, lacustrine, palustrine, and terrestrial strata. In the 1930s the lake was drained and is serving now as a huge agricultural area. The 33 m-core recovered in fall 2016 along with several shallower drill cores up to c. 15 m, reveals insights into a unique mixed terrestrial palaeo-environmental archive in Andalucía influenced by the Atlantic Ocean and hence the North Atlantic Oscillation (NAO) within the Gulf of Cádiz. The basin's evolution was influenced both by the postglacial marine transgression and by an active tectonic fault controlling most of the accommodation space by causing subsidence. Our long core was accompanied by further corings along an E-W striking transect in order to reveal also the relation of the influence of tectonic activity with sedimentary sequences. Multi-Sensor Core Logging has been completed. Results of sedimentological, geochemical and micropalaeontological analyses will be presented in the frame of the climate variations during the Late Pleistocene and the Holocene, along with a preliminary age-depth model based on radiocarbon (AMS-14C) and optical stimulated luminescence (OSL) dating techniques. Our investigations ultimately aim at providing valuable information on major Late Pleistocene to Holocene climatic and palaeo-environmental fluctuations in the southernmost part of the Iberian Peninsula.