**A multi-proxy paleoenvironmental reconstruction of the Late Pleistocene and Holocene at archaeological site, Txina-Txina, Mozambique**

Mussa Raja, Elena Skosey-LaLonde, Ana Gomes, Nuno Bicho

Today, there are numerous techniques and methods used in the reconstruction of paleoenvironments. This study presents the results of the application of three such indicators used in the reconstruction of paleoenvironments in tropical regions, particularly in southern Mozambique. By using sedimentological, geochemical, and archaeological proxies, our study aims to reconstruct the environmental conditions of the archaeological site Txina-Txina.

The analysis of these indicators revealed that the site has fluvial deposits at its base that were covered mainly by colluvial deposits, which are interspersed by some river deposits, that contain archaeological horizons dating since ca. 32,000 years old. According to these dates, the gravel layers were deposited in wet periods that occurred before 29,000 and after 14,000 BP, during the African Humid Period (AHP).

The lithic concentrations indicate that the site was likely occupied in both hot and humid periods as well as in cold and dry ones. Archaeological evidence shows that the anatomically modern humans who occupied Txina-Txina have adapted to these environments conditions, exploring the terrestrial and fluvial ecosystems, thus highlighting their resilience to paleoenvironmental changes.

**Keywords:** Multi-proxy; Paleoenvironment; Late Pleistocene; Holocene; Txina-Txina; Mozambique