

Nile margin sediments: archives of landscape instability over the Nile catchments

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The study on the Nile delta targeted several cores MS27PT and MD04-2726 collected in the vicinity of the most recent active Rosetta canyon, allow to record the seasonal discharges of the Nile river in relation with the East African monsoon for the last 25,000 years. This sediment provides unique archives to document both landscape instability over the Nile catchment (soil erosion clastic) and past changes of the hydro-climate in eastern Mediterranean Levantine region. In this study, we use major element concentrations and Nd isotopes measured from the same aliquot both on the lithogenic and planktonic foraminifera of Nile deltaic sediment. The comparison with new publish data for Nd in the present-day Mediterranean should allows for monitoring of Nile freshwater inputs from monsoonal tropical source and to address the question of the impact of Nile outflow change on the Mediterranean thermo-haline circulation.