



GEOARCHAEOLOGY OF PARANÁ RIVER, BRAZIL: CHRONOSTRATIGRAPHY AND LANDSCAPE DEGRADATION

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The geoarchaeological research of the upper Paraná River, Brazil, aiming to demonstrate that the archaeological remains can be analytical instruments of the seemingly homogeneous tropical soils. About 290 archaeological sites were identified in the margins of this river, with three hydroelectric power plant reservoirs implanted. For analyzing the morphological dynamics of dammed rivers' margins, 119 archaeological sites located in the reservoirs depletion range were monitored over ten years, with the periodic measurement of the regression rates under the action of water erosion. Sedimentological samples were collected in the profiles of eight excavated archaeological sites for textural analysis. With the dating of approximately 200 charcoal (¹⁴C) and ceramic (thermoluminescence) samples, were identified remarkable depositional changes during the Holocene and the temporal sequence of successive human occupations: 7400 to 4800 yr BP (hunter-gatherers); 3400 to 4500 yr BP (hunter-gatherer-fishermen); and after 1500 yr BP (indigenous potter farmers). Through the monitoring of erosional processes, it was noted that in accordance with the reservoirs characteristics (height of the margins, width of the reservoir and prevailing wind directions), water erosion can develop predominantly by shearing/slicing of high margins (up 60.50 m on margin regression) or by sheetflood erosion of margins with gentle slope.

Palavras-chave: Holocene, sedimentology, dammed rivers.

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