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**NATURAL AND ANTHROPOGENIC ASPECTS OF THE BRAZILIAN COAST: EXAMPLES OF GEOMORPHOLOGICAL CHANGES**

**ABSTRACT**

The research project contemplates studies developed in the elaboration of the doctoral production to the graduate measure of the State University of Campinas, under the guidance of Prof. Dr. Arquimedes Perez Filho and financed by FAPESP – São Paulo Research Foundation. The general objective of this work is to obtain absolute ages of surface coverings through OSL - Optically Stimulated Luminescence data on low terraces Marine and Fluviomarine, located on the coastal plain of the Paraíba do Sul River, correlating with Holocene climatic pulsations resulting from a change in the base level and its relationship with the construction of the Açu Port. The specific objectives are (i) to identify and analyze the surface coverings at different levels of low terraces marine and fluvialmarine in the Holocene from a geomorphological and geochronological approach, (ii) to elaborate environmental scenarios from absolute ages obtained through OSL, and to correlate with possible changes as of the implementation of Açu Port, (iii) and to project the consequences of the implementation of the enterprise in the changes of the coastline and sedimentary dynamics. The hypothesis is that the spatialization of different levels of low marine and fluvial terraces present in the coastal plain of the Paraíba do Sul / Rio River are the result of changes in the base level related to transgressions and marine regressions due to Holocene climatic pulsations. The construction of the Açu Port will alter the natural process of sedimentary circulation and compartmentalization of the coastal plain of the Paraíba do Sul River in the long term. To achieve the objectives, the identified and spatialized low through the analysis of orbital and non-orbital images and fieldwork. Morphometric identified methodologies, absolute sedimentological and informative studies of surface coverings on terraces through Optically Stimulated Luminescence (OSL). Finally, it is mentioned that the results of this research, associated with other works related to the theme, will allow a better understanding of the geomorphological dynamics, especially regarding the evidence of Holocene climatic pulses.

Researcher biography:

Geographer at the Flumienense Federal University, Master in Geography at the Flumienense Federal University, and Ph.D. student at the Post-Graduate Program in Geography of the State University of Campinas (UNICAMP). I have experience in Physical Geography, focusing on Coastal Geomorphology. Currently, I work on low-terraces geochronology (fluvial, fluviomarine, and marine ones) as geo-indicators of the climate pulses of the Holocene using both optically stimulated luminescence (OSL) and ground penetrating radar (GPR). Researcher at the Geomorphology Laboratory of the UNICAMP Institute of Geosciences.