

## **Modeling Landscape changes with hipsometric curve, in Pantanal Region, Brazil.**

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Bodoquena and Amambai ranges, in Pantanal region, central South America, were developed in the hinge of lithosphere forebulge associated with Andean thrust over continental plate. Northward, this forebulge was broken down forming the Pantanal Basin. Bodoquena was sculptured on metamorphic and folded rocks of Archean and Proterozoic ages, while Amambai is sustained by sedimentary and basaltic rocks weakly dipping to the east. Within these two ranges lies the Miranda valley, whose west part host the geotourist Bonito area, with beautiful landscapes, caves and clean water surges. The extensive occurrence of limestone promoting high rate of water infiltration has preserved early landscapes developed after South American Planation. In order to define the spatial organization of these successive surfaces and to quantify the amount of erosion transported from the region towards the Pantanal basin, the hypsometric curve of the area was analyzed. Three common hypsometric terraces were identified and modeled as the differentially well stabilized concave base level for their time. The lowest segment associated with the present day base level, presents a convex form of initial incision. (Pantanal-Chaco Project, European Union Research Fund Federal)