

Title / Titre / Titel: Ecological studies within the "Pantanal Matogrossense"  
(Mato Grosso State, Brazil), using remote sensing  
techniques.

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Abstract, Sommaire / Zusammenfassung: The objective of this study, which is part of a larger research project at the lower section of the rio Cuiabá and its' surroundings, is to identify the vegetation cover of an area of about 500 km<sup>2</sup>, using remote sensing techniques. The methodology used to study this partially flooded region, consisted in the interpretation of color infrared aerial photographs and the digital processing of MSS-LANDSAT scenes from two different satellite overpasses: november 1980 (dry season) and may 1981 (end of rainy season). For the latter, two classification algorithms, implemented at INPE's system IMAGE-100 were used: non-supervised (K-means) and supervised. Using these procedures, five main classes were obtained: dense forest, gallery forest, wetlands I ("campos inundáveis"), wetlands II and water. The remote sensing techniques used, specially in a multi-temporal approach, allow a small scale mapping of the main natural environments and give an overall view of the flooding process within the area under study.