

← **A REMOTE SENSING SURVEY OF VEGETATION DISTURBANCES IN THE BRAZILIAN PANTANAL WETLAND FOR THE YEAR 2004**

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The Pantanal wetland, humanity heritage, is losing fast the status of one of the last pristine frontiers of the planet due the increasing disturbance in vegetation cover. Changes in flood regime, fires, cattle overgrazing and deforestation for implementation of cultivated pastures to increase cattle production and for charcoal production to siderurgical industries, are the main causes. The deforestation and other disturbances on vegetation areas in the Brazilian Pantanal for the year 2004 was quantified and mapped using C-BERS-2 Brazilian-Chinese satellite images, sensor CCD. It was visually interpreted and digitized via computer screen in higher detail than the scale 1:100.000. Aerial georeferenced digital photographs as ground reference, Landsat 7 ETM+ image mosaic and deforestation digital map of year 2000, was used as ancillary data. Combinations of bands 2, 3 and 4, and image enhancing techniques, was applied for the identification and delimitation of disturbed areas. The total disturbed area was quantified in 16.644 km², or 12% of the Brazilian Pantanal total area. The boundaries with the highlands at north, east and south, driest areas, showed a more intense pattern of vegetation disturbance due deforestation. The percentage of vegetation disturbance for each physiognomy were: Chaco forest (20.2), Cerrado savanna (14.8), "Cerradão" densely forested savanna (11.1), grassy Chaco (9.4), deciduous forest (8.9), grassy savanna (7.4), Chaco (6.1), "Encrave" spots containing species of savanna/Chaco/deciduous and/or semideciduous forest (6.1), semideciduous forest (5.1), gallery.

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