ANTROPIZATION DYNAMICS ANALYSIS OF THE "CERRADO" – BRAZILIAN SAVANNA – IN THE ECOLOGICAL STATION OF URUÇUÍ-UNA AND SORROUNDING AREAS IN PIAUÍ STATE, BRAZIL, BASED ON ORBITAL IMAGES FROM 2003 TO 2005.

Verônica Fernandes Gama¹ (INPE, Bolsista PIBIC/CNPq) Alfredo Pereira² (SERE/INPE, Orientador)

ABSTRACT

The Cerrado is located mainly in the central part of Brazil and represents 20% of the national territory. Fire is one of the most important ecological features of the cerrado, which can be started naturally, by lightning, or by the interference of man. Studies on this biome are important for the maintenance of the biodiversity and because it is the habitat of many endemic species that are at risk of extinction. The Ecological Station of Uruçuí-Una is situated in the chosen area of study, and is a 2,034.27 km² piece of land between Uruçuí-Una and Riozinho rivers, in Baixa Grande do Ribeiro city, in Piauí, a northeastern state. This conservation unit should provide protection to its ranges of cerrado, spring waters, creeks and rivers. But the truth is its delicate natural equilibrium is endangered because of antropization. Deforestation and the burning of large areas outside of the station, by farmers, and inside by posseiros (squatters) to promote rice and soy plantations are the biggest dangers to the ecosystems there. The objective of this study is to measure the deforested and burned areas and evaluate the antropization dynamics in the ecological station of Urucuí-Una and its surroundings, using orbital images of the sensors CCD/CBERS-2, TM/Landsat-5 and ETM+/Landsat-7. Two dates from each of the years 2003, 2004 and 2005 are analyzed: one at the beginning of the dry season and one at the end. Results of the image of July 2003 show $3,405.32 \text{ km}^2 (10.2\%)$ of deforestation and $826.66 \text{ km}^2 (2,5\%)$ of burn in the total area of $33,544.45 \text{ km}^2$ in study and 108.31 km^2 (3.7%) of deforestation and $35,28 \text{ km}^2$ (1,2%) of burn in the station. Images of the end of the dry season of 2003 and of both dates of 2004 and 2005 are currently under analysis. This study will be finished in December of 2008.

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¹ Estagiária-bolsista da Divisão de Sensoriamento Remoto do INPE. **E-mail: veronica@dsr.inpe.br**² Pesquisador da Divisão de Sensoriamento Remoto do INPE. **E-mail: alfredo@dsr.inpe.br**