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## Assessing the impact of deforestation using satellite data.

**P. A. Hernandez-Leal**, A. Gonzalez-Calvo, L. Arvelo-Valencia and M. Arbelo Department of Physics FEES, University of La Laguna, Avda. Astrofísico Francisco Sánchez s/n, La Laguna, S/C de Tenerife, 38202, Spain

(pedro.hernandez@ull.es / Fax: +34-922318228 / Phone: +34-922318225)

Desertification processes that affect wide areas in the world, are an important environmental concern that can properly be investigated and assessed using remote sensing techniques. The use of data from the Advanced Very High Resolution Radiometer (AVHRR) on board of NOAA satellites has been very helpful on that sense due to its high temporal resolution and long series of data. Nevertheless a detailed spatial analysis of the extension of this phenomenon must be made with a higher spatial resolution like the one provided by Landsat-TM sensor.

The combination of these two sensors can help us to have a better understanding about vegetation dynamics. In order to prove its usefulness, this work has been focused in a region specially affected by deforestation processes, the Hispaniola Island, shared by the Dominican Republic and Haiti. The study with AVHRR data shows the temporal evolution of this problem using the Normalized Difference Vegetation Index (NDVI) and Land Surface Temperature (LST) as key variables. Meanwhile the Landsat-TM images considerably remark the spatial distribution of the affected areas mainly situated in the Haitian side, bringing about a high contrast in vegetation between these two countries. Floods that have caused a lot of damage in Haiti during last year 2004, constitute a clear example of how the deforestation due to the human impact over the land cover use, and consequently the degradation of soils have damaged the natural environment.