

Geological environment characteristics and impacts in ecosystems due to mining extraction in Moa, Cuba

¹CAMPOS, M., AZCUY, E., MENDEZ, D. ¹Geophysical and Astronomical Institute, Havana City, Cuba.

The work is based on the impact valuation in the geological environment due to extraction in the open-air lateritics deposits and the urban industrial development in Moa, the main mining region in Cuba.

The used materials were: topographical and geological map scale 1: 50 000, cosmically photos and images, air photos from different years, field work and a lot of bibliography.

During the analysis process was carry out digital image processing, geomorphologic studies and elaboration of Digital Earth Models.

Were identified the impacts follows:

The loss of superior soils covering in mining zones.

Changes in the relief and landscape due to mining and construction activity intensifying the haulage capacity of superficial waters glide with the consequent furrows erosive formation.

Sedimentation processes along fluvial valley and coastal zones with damages and contamination the ecosystems.

The study made showed that the superficial geological processes in the region are conditioned by the steeped character of relief, the abundant rains, and the presence of easily soils to erode, being the human activities related with the mineral exploitation and construction, the most notably have increasing the superficial processes. These activities produce geomorphologic alterations and notables changes in the different ecosystems.