

Developing of a muon tomography system for the study of geological objects

This work describes the initial steps to develop and build a muon scattering tomography system to investigate the space and time changes in the internal density distribution inside geological structures. As a start, a very detailed simulation chain to calculate the cosmic ray background flux is being developed in order to estimate the most convenient places and the exposure time of the muon detector to study a small mountain near the National University of Engineering. This project is a combined effort between the National Aerospace Research and Development Commission (CONIDA) and the National University of Engineering (UNI). Although this technology is not novel, this is the first time a project like this will be developed in the country.

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