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MONITORING THE SUBSIDENCE PHENOMENON IN PETROSANI CITY USING MODERN METHODS AND TECHNOLOGIES

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Abstract

In the context of sustainable development of Jiu Valley overall, and of Petroșani city in particular, we must consider several factors. One of the most important factors influencing the development process is the subsidence phenomenon found in Maleia region – Livezeni, region with a very high touristic potential, as well as the other parts of the Jiu Valley Mining Region. The locations affected by the mining exploitations are mainly mono-industrial regions, and the appearance of potential development directions are closely connected to the results of the influence from these exploitations over the environment. Underground mining exploitations have as effect the displacement and the deformations of the terrains in the exploitation region. Studying the influence of the underground exploitation over the surface is necessary for highlighting the movement phenomenon and taking measures to protect the constructions on the surface and even the surface itself.

Key words: GIS, subsidence, displacement, deformation, Petrosani, underground mining exploitation

Received: February, 2012; Revised final: June, 2012; Accepted: July, 2012

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