

Abstracts

• Geophysical methods of analysis sliding leases of Carpathien region

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Problems of analysis of sliding leases are most considerable for regions assaying neotectonic of move. Recently locale the activating sliding and collapsing activity is supervised in Carpathien region. The special hazard is introduced by progressing landslides and dips in densely occupied regions of Carpathians. The problems of geophysical analysis of sliding processes in limits of urban and industrial constructions are complicated by a considerable extent of hums, which one handicap recording physical fields.

For analysis of collapsing -sliding processes the Institute of Applied Problems of Ecology, Geophysics and Geochemistry designs hardware - methodical geophysical complex permitting to conduct operations in urban and industrial bands. The proposed complex includes methods of geoelectric and seismoacoustic sondage.

The complex bases on usage of portative multifunction geophysical station. The station realizes acquisition

of impulsive electrical exploration, natural electromagnetic field of the Earth, and seismoacoustic datas.

At analysis of sliding leases the bands of maximal humidifying of soils are mapped. The radiants of underground water-courses reshaping a sliding band are instituted.

At analysis of collapses apart from bands of heightened humidifying the underground vacuities of a natural or synthetic genesis are mapped. The bands of intersection of underground vacuities with natural or man-caused water-courses, as a rule, results dips formation.

Depth of study of bands of potential hazard about 100 m.

The hardware complex is small-sized, is unjammable and not power-intensive. Is handled by one operative. The instrumentation is mated with GPS and field computer. It allows to effect constructing maps and vertical geoelectric and seismoacoustic sections simultaneously with measuring of geophysical datas.

Connection of the eastern Periadriatic and Mid-Hungarian zones and its implication to Paleogene paleogeography, Miocene extrusion tectonics (for poster)

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The Periadriatic zone displays a very important tectonic feature crosscutting the southern part of the Alpine orogenic wedge. The zone facilitated the ascent of Paleogene magmatic rocks and accommodated strike-slip motion between the Eastern and Southern Alps. In that way, the zone formed the southern boundary of the eastward moving Alcapa unit. The connection of this important zone toward the internal Pannonian area represents a key point in the late Paleogene-Miocene tectonic reconstruction of the region and, in particular, in

extrusion models. In our presentation we summarize stratigraphic, structural and paleomagnetic data in order to emphasize connection and former continuation of Periadriatic and Mid-Hungarian zones and the consequences for tectonic models.

Premru (1981) and Báldi (1986) were among the first to delineate the stratigraphical similarities between the Slovenian and Hungarian-South Slovakian basins. The unique nature of the succession within the Pannonian-Carpathian area suggest that it was deposited in a single