



Landslides on salt deposits - monitoring with electrometry

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Electrometry is the most frequent applied geophysical method to study dynamical phenomena related to the massive salt deposits presence due to resistivity contrasts between salt, salt breccia and covering formations. On vertical resistivity sections, obtained with VES devices, these three compartments are clearly differentiated by high resistivity for the massive salt, very low for salt breccia and variable for covering formations. When the land surface is inclined, shallow formations are moving gravitationally on salt back, producing a landslide.

Landslide monitoring involves regular reps measurements of geoelectrical profiles into a grid covering the sliding surface, in the same conditions (climate, electrodes position, equipment and masurement parameters).

The purpose of monitoring landslides in the Slanic Prahova area, was to detect the changes in resistivity distribution profiles to superior part of subsoil measured in July 2014 and July 2015.

Measurement grid included several representative cross sections in susceptibility from landslides point of view.

The results are graphically represented by changing the distribution of topography and resistivity differences between the two sets of geophysical measurements.

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