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Electromagnetic studies on geodynamics related to the landslides associated to the seismic events

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The paper will concentrate all the electromagnetic information concerning the geohazard evaluation in the Southern Subcarpathians, more exactly, in the Vrancea seismic active area and Provita de Sus associated landslide zone. Starting from a pressing necessity to anticipate the occurrence of a dramatic seismic event in this zone, such that from 1977, we evaluated all the possibilities offered by the electromagnetic methods and selected parameters suitable to indicate important geodynamic changes in the Earth, responsible both for earthquakes and their associated landslides. Briefly, we focused mainly on a parameter stable in time, in non-geodynamic conditions, and we have started to monitor this since the 2002 year, so that a large scale of electromagnetic data have been carried out, what permit us to compare the electromagnetic field changes with the seismic activity, in real time, approaching thus a new electromagnetic methodology related to the domain of the seismic precursors. The final conclusions let us to assert the importance and usefulness of combining, as much as possible, various types of information, so that the evaluation of the seismic geohazard and of the landslides associated to them to become more accurate. Additionally, to succeed in a short term prediction, it should be necessary a wide interdisciplinary scientific group to make a complex monitoring of conclusive parameters with precursory character, and an almost real-time analysis of the data. Therefore, this paper is subscribed to the general electromagnetic research efforts to contribute to a hard objective – to establish a more accurate methodology for evaluating the seismic hazard and supplying useful information about geodynamics of the landslides associated, by revealing the anomalous behaviour of the precursory electromagnetic parameters in time.