



VLF/LF EM emissions as main precursor of earthquakes and their searching possibilities for Georgian s/a region

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Authors of abstract have created work which offers model of earth electromagnetic emissions generation detected in the process of earthquake preparation on the basis of electrodynamics. The model gives qualitative explanation of a mechanism of generation of electromagnetic waves emitted in the earthquake preparation period. Besides, scheme of the methodology of earthquake forecasting is created based on avalanche-like unstable model of fault formation and an analogous model of electromagnetic contour, synthesis of which, is rather harmonious.

According to the authors of the work electromagnetic emissions in radiodiapason is more universal and reliable than other anomalous variations of various geophysical phenomena

in earthquake preparation period; Besides, VLF/LF electromagnetic emissions might be declared as the main precursor of earthquake because it might turn out very useful with the view of prediction of large ($M \geq 5$) inland earthquakes and to govern processes going on in lithosphere-atmosphere – ionosphere coupling (LAIC) system.

Since the other geophysical phenomena, which may accompany earthquake preparation process and expose themselves several months, weeks or days prior to earthquakes are less informative with the view of earthquake forecasting, it is admissible to consider them as earthquake indicators. Physical mechanisms of mentioned phenomena are explained on the basis of the model of generation of electromagnetic emissions detected before earthquake, where a

process of earthquake preparation and its realization are considered taking into account distributed and conservative systems properties.

Up to these days electromagnetic emissions detection network did not exist in Georgia. European colleagues helped us (Prof. Dr. PF Biagi, Prof. Dr. Aydın BÜYÜKSARAÇ) and made possible the installation of a receiver. We are going to develop network and put our share in searching of earthquakes problem.

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