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Assessment of geodynamical processes evolution in Georgia

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Determination of earthquake precursors is a task of global importance. The territory of Caucasus is seismoactive region being directly effected by the tectonic interaction between Arabian and Eurasian plates. The strong deformation processes developed there cause the accumulation of tectonic energy- stress, which discharges by occurrence of numerous earthquakes. It is known that there are number of earthquakes precursors, which can be registered in the various geophysical fields: (Earth's ionosphere, geomagnetic field, hydrogeodeformation field, temperature field, electroconductivity and hydrochemical (Rn, macro and micro-components). In the frame of project FR17_633 carried out investigation for detected anomalies during preparation of average grade earthquake, was developed data of the water level and atmospheric pressure from the Hydrodynamic monitoring network, as well as data from Dusheti Geomagnetic Observatory. Has fixed the hydrogeodeformation field variation caused by the earthquake preparation process and reflection of the critical stress in the water level and abnormal variations of the magnetic field. As a result, have been identified preliminary anomalies and has been confirmed high sensitivity to the geodynamic processes.