Geodynamics of the territory of Armenia based on the results of comprehensive observations

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Abstract The geodynamics of the earth's crust in the territory of Armenia is given according to seismic data, deformographic measurements, hydro geodynamic observations of the groundwater level and geochemistry of mineral waters in the central part of the region. The map of the epicenters of earthquakes over the past three years includes stressed sections (concentration of earthquake epicenters) of the earth's crust with increased activity geodynamic processes. Based on the results of registration of deformations of two directions, the values of areal, volumetric, and vertical deformations are calculated. Variations in the water level in hydro geodynamic wells were obtained due to seismic events; the amplitudes of the variations depend on the magnitude of the earthquake, the distance from the epicenter and the magnitude of the calculated deformation of the earth's crust. The main components of the chemical composition of mineral waters (CL, HCO_3, SO_4, Mg), gas - CO_2 and *Ph* in comparison with seismicity and other geodynamic processes of the earth's crust.

Keywords geodynamics, geochemistry, deformation, variation, borehole, earth crust, seismicity, earthquake, mineral water, profile.

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