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Geological hazard monitoring system in Georgia

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Georgia belongs to one of world's most complex mountainous regions according to the scale and frequency of Geological processes and damage caused to population, farmlands, and Infrastructure facilities. Geological hazards (landslide, debrisflow/mudflow, rockfall, erosion and etc.) are affecting many populated areas, agricultural fields, roads, oil and gas pipes, high-voltage electric power transmission towers, hydraulic structures, and tourist complexes. Landslides occur almost in all geomorphological zones, resulting in wide differentiation in the failure types and mechanisms and in the size–frequency distribution.
In Georgia, geological hazards triggered by: 1. Activation of highly intense earthquakes; 2. Meteorological events provoking the disaster processes on the background of global climatic change; 3. Large-scale Human impact on the environment.
The prediction and monitoring of Geological Hazards is a very wide theme, which involves different researchers from different spheres. Geological hazard monitoring is essential to prevent and mitigate these hazards. In past years in Georgia several monitoring system, such as Ground-based geodetic techniques, Debrisflow Early Warning System (EWS) were installed on high sensitive landslide and debrisflow areas. This work presents description of Geological hazard monitoring system in Georgia.