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Microseismic Activity in Armenian Upland

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Seismic networks are a source of valuable data for seismological research. Since 2010 in cooperation with the French CEA/DASE, the broadband seismic network in Armenia has been upgraded. Digital seismological stations were deployed in the territory of Armenia and they are providing data that enabled to conduct of various research activities, including the study of microseismicity and active tectonics in the region.

The seismicity of the Armenian Upland relates to the collision of Arabian and Eurasian plates, which is characterized by a diffusive distribution of shallow earthquakes of various magnitudes.

The strong shallow earthquakes as well as microearthquakes are expressed by well-pronounced active surface faulting. The microearthquake pattern observed over the past few years is consistent with the tectonic pattern of the study area including historical seismicity. In general, the seismicity in the Armenian Upland correlates with the known geologic structures. The microseismic activity also was studied from the point of view of large crustal earthquakes preceding.

Promotional text

A sub-network of 6 stations has been deployed in 2018 and 2019 on the Armenian territory thanks to a technical and scientific collaboration between the RSSP and the CEA/DASE aimed at improving the completeness magnitude, quality and representativeness of the catalog.

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