

Faults and Peculiarities of Seismicity and Fault Behavior on the Territory of Armenia

Earthquakes are the expression of the continuing evolution of the Earth planet and of the deformation of its crust and occur worldwide. Armenia lies in the central part of the Armenian Highland and is situated on the north of the collision boundary between the Arabian plate and the Eurasian plate. This region is one of typical collision boundaries in the world. The Arabian plate is moving northward at the rate of 20-30 mm/year and collides with the Eurasian plate. The Anatolian and the Iranian blocks are squeezed westward and eastward respectively. Seismic events in the territory of Armenia are determined by its position in the collision zone of the Arabian and Eurasian plates. In the present work the relationship between well known active faults and local seismicity is considered. The national catalogue of Earthquake and catalogue of focal mechanisms are used. More than 400 earthquake focal mechanisms have been analyzed and some peculiarities of faults behavior are revealed.

Track Classification: Theme 1: The Earth as a Complex System