Active fault map and ASTER global digital elevation model in Turkey

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Active fault map of the Turkish mainland, a guide document showing the geographic distribution and general characteristics of the active faults was published at a 1:1,250,000 scale by MTA (General Directorate of Mineral Research and Exploration, Turkey). This is the first seismotectonic database for Turkey under the framework of the National Earthquake Strategy and Action Plan—2023.

Turkey is located in one of the most seismically active regions in the world. On the basis of the data sets, 18 major seismotectonic zones were delineated for Turkey and the surrounding region. The compilation and storage of the seismotectonic data sets in a digital GIS will allow analyses and systematic updates as new data accrete over time.

ASTER GDEM (Global Digital Elevation Model) Version 2 with 30-meter postings has been released. The relief map delineates linear features, which clearly correspond to the active faults. These linear features in the GDEM suggest possibility to find more active faults.

Keywords: active fault, Turkey, Global Digital Elevation Model, ASTER, earthquake, seismotectonics

