

Crustal Structure in the Marmara Region and the Seismicity along the North Anatolia Fault Zone

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Abstract

We present the results of the recent seismic/seismological investigations in the Marmara Region. Both active and passive sources are used to determine the crustal structure in the region using travel time tomography. We present 2-D images along profiles crossing the basins in the Sea of Marmara. The velocity structure is constrained for the upper crust only (<10 km) and indicates strong lateral heterogeneities. We also present the ongoing seismological projects in the Marmara Sea.

The improvements on the seismological network in Turkey following August 17, 1999 earthquake has provided more accurate seismicity catalogs along the North Anatolia Fault Zone. We present the current state of the seismological network with time and spatial distribution of the seismicity along (NAF) following August 17 1999 earthquake.