



Combined Earthquake Catalog and the Seismicity of Turkey

Musavver Didem CAMBAZ

Bogazici University, KOERI, NEMC, Istanbul, Turkey (didem.samut@boun.edu.tr)

Three largest seismic networks of Turkey are operated by Bogazici University Kandilli Observatory and Earthquake Research Institute (KOERI), Prime Ministry Disaster and Emergency Management Presidency (AFAD) and TÜBİTAK Marmara Research Center (MRC). In this study an integrated homogeneous earthquake catalog is obtained by combining the independent earthquake catalogs of KOERI, AFAD and MRC. Almost 120.000 earthquakes in five years between 2008 and 2013 recorded by more than 400 broadband seismic stations in the area were compiled and analysed. Integrated homogeneous earthquake catalog obtained in the frame of this study is used to determine spatial and temporal variations of the earthquakes, b-value and the magnitude of completeness in the area. Results of this study will not only improve the knowledge on the seismicity and active tectonics of the area but also will lead to testing of different tectonic models proposed for Turkey and surrounding areas and will help to derive a tectonic model of the study region based on seismological data.