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# Neotectonics of Savastepe-Saribeyler (Balikesir) area, NW Anatolia, Turkey

**A. Çona** (1) and H. H. Selim (2,3)

(1) Balikesir University, Engineering-Architect Faculty, Geology Engineering Dept., Balikesir, Turkey, (2) Eurasia Institute of Earth Sciences, Istanbul Technical University, Maslak, Istanbul, Turkey, (3) Kocaeli University, Engineering Faculty, Geology Engineering Dept., Kocaeli, Turkey

Savastepe-Saribeyler (Balikesir) is located in the West Pontides orogenic zone. The investigation area consists of two uplifts located at NW and SE margins and a depression between these uplifts. The Early Triassic aged basement of the study area, Sevisler Complex which was affected by green schist metamorphism. Late Triassic aged Turgutalp formation unconformably overlie Sevisler Complex. Neogene aged units consist of Early Miocene aged Soma formation, Late Miocene aged Dualar formation and Late Pliocene aged Akcaavlu formation. Pleistocene aged Savastepe formation unconformably overlie the Neogene units. Alluvium and scree are the youngest units in the study area. According to seismological data of Savastepe-Saribeyler area, earthquakes occurred on normal faults of the region. The most significant earthquakes are 1981 (Mw=4,2), 1984 (Mw=4,6), 1985 (Mw=4,6) and 1987 (Mw=4,4) earthquakes. The moment tensor solutions of these earthquakes show that faults are of normal fault characteristics. In the study area, there are three groups of faults, NW trending strike slip faults which formed the basins, NW-SE trending normal faults which formed the grabens of the West Anatolia and approximately E-W trending normal faults. Seismological data indicate that the earthquakes in the region mainly occurred on normal faults.