

Neotectonic Evolution of the Uludağ Uplift and its connection with of the North Anatolian Fault Zone (Bursa-Turkey)

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At the southeast of Marmara, there exist basins and uplifts formed due to the right lateral movements of the southern branch of the North Anatolia Fault (NAF). One of these is the Uludağ uplift, which is one of the most attractive structures that was affected by the active tectonic developed around the Marmara Sea. Uludağ uplift is a mountain that is 40 km long in NW-SE direction, 20 km wide and 2543 m high. The mechanism that supplied the development of Uludağ uplift is the stress related with the deviations in local movement vectors that were formed by the movement of the Anatolian block eastward in the southern Marmara Region. NE, SW and southern sides of the Uludağ uplift were bordered with these faults. By combining the satellite images and the digitized counter lines from topographic maps, these structures that are difficult to be traced because of plant cover and morphological obstacles are exactly clarified. The prepared maps are verified with field observations and the characteristics of these faults are described. At Plio-Quaternary, Uludağ uplift was elevated about 500 m and 1000 m according to the NE-SE zone and Bursa plain respectively. Related with Thrace-Eskişehir Fault (TEF) the first elevation of Uludağ belongs to Early Miocene and the later.