

TECTONIC ZONES OF THE CAUCASUS AND THEIR CONTINUATIONS IN THE NORTH-EASTERN OF TURKEY : A CORRELATION

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ABSTRACT.— The study area covers the Caucasus and the northeastern Turkey. Tectonic zones of the Caucasus and their continuations in the northeastern Turkey, and also the relationships, lateral variations, similarities and differences of the both district, will be presented. On the basis of the main geologic characteristics, the rock units of the Caucasus are divided into the tectonic zones. Each zone has pre-Liassic, Liassic and post Liassic units reflecting different geotectonic environment. The northern part named as the Great Caucasus, the southern part as the Lesser Caucasus, median part as the Transcaucasus of the Caucasus was bordered by the Scythian platform to the north and by the Iranian platform to the south. The tectonic zones of the Great Caucasus lie from north to south are presented below: the Laba-Malka zone (the Bechasinian Subzone and the Forerange Subzone), the Main Range zone, the Southern Slope zone. The Gagra-DJava zone and the Drizula massif and its covers are situated to the north, the Somcheti-Kafan (Karabakh) zone to the south and the Adjara-Trialetian and Talysh zones which are the continuation of each other are between the zones of the Transcaucasus. The ophiolitic belt (the Sevan-Akeran Ophiolitic zone to the north, the Vedi Ophiolitic zone to the south) of the Lesser Caucasus and the Miskhan-Zangezur zone and the Araks zone of the northern part of Iranian platform have been differentiated. The Caucasus tectonic zones are bordered by the overthrust planes dipping 70-80 degrees to the north. The Oligocene-Recent molasse showing enormous lateral and vertical facial changes, sits upon the rocks of the tectonic zone conformably or unconformably, in places. The results, presented below, can be obtained by the correlation of the Caucasus tectonic zones and tectonic zones of northeastern Turkey: 1- The tectonic zones of the Great Caucasus and northern part of the Transcaucasus can not be followed in the northeastern Turkey. 2- The Adjara-Trialetian zone continues along the Black Sea Shores. 3- The Somcheti-Kafan (Karabakh) zone, which is southern part of the Transcaucasus corresponds to the Pontian zone. But, considerable differences on the basis of the stratigraphic sequence and facial changes are observed in the both sides of the zone. 4- The Lesser Caucasus ophiolitic belt corresponds to the North Anatolian ophiolitic belt. There are two subzones, one of them is to the north and another is to the south, showing similarities in both side of the belt. 5- Iranian platform of the Lesser Caucasus corresponds to the Taurus platform, in general. Pre-Liassic Miskhan-Zangezur zone of Iranian platform corresponds to the Central and East Anatolian massifs the Araks zone to the Taurus zone respectively. If the corresponding tectonic zones of the Caucasus and northeastern Turkey are correlated, considerable facial changes as well as the similarities are observed. A lot of the differences result in the lateral and vertical changes of the zones.