

flysch, by a normal transition. On this flysch, the pelagic turbiditic limestones of Cretaceous age ("Ermioni" type) were overthrust during the late Eocene.

TECTONOSTRATIGRAPHY OF VARIOUS ROCK UNITS IN THE REGION OF ARSIN (TRABZON) - İYDERE (RİZE), EASTERN PONTIDS, NE TÜRKİYE

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The Pontids, where Caledonian, Hercynian and Alpine deformations and accompanying volcanic activities have often been noted, brings about and approximate E-W trending chain in northern Turkey. The abundance of volcanic rocks of various ages including Permo-Carboniferous, Triassic, Liassic, Dogger, Malm, Cretaceous, Eocene, Miocene and Plio-Quaternary together with sedimentary units and intruding plutons is a typical character of the Pontids. As a result, the stratigraphical relations of different rock units has become more significant in the geological and in particular geotectonic interpretation of the region. Therefore, the region of Arsin-tyidere lying about 15 kms to the east of the city of, Trabzon, in Eastern Pontids of NE Turkey has tectonostratigraphically been studied. The area is mainly underlain by Upper Cretaceous sedimentary and volcanic rocks intruded locally by doleritic and/or tonalitic intrusions. The sedimentary units include limestones, marls, sandstones and tuffites whilst the volcanics, which have extensively been altered, consist essentially of dacites, andesites, basalts, basaltic-andesitic tuffs and agglomerates. Studies have shown that, in terms of their stratigraphic attitudes, two distinctly different levels may be distinguished: One of them is "lower" and other "upper". The former comprises dark-coloured, highly altered basalts, basaltic agglomerates, andesites, columnar jointed dacites, and basaltic-andesites, tuffs. The dolerites and/or tonalites are locally found intrusive into these extrusives in which weakly preserved traces of layering and well-developed joints are the observable planar structures. The upper level sits on the lower conformably and possesses well-bedded, generally light-coloured alternating units of limestones, marls, sandstones, tuffites, intensely altered dacites-andesites-basalts and basaltic-andesitic agglomerates. The visible measured total thicknesses of the former and latter level rocks are approximately 300 and 350 metres respectively. The studies have indicated that a well-evolved graded bedding is always present in the upper, whilst no indications of it were encountered in the lower level rocks. Besides, joints and bedding in the upper level rocks, SW plunging folds, and small scale faults distinguished via mylonitized horizons are also present. Interpretation of field data has also shown that folding is presumably older than jointing.