

REGIONAL INTERPRETATION OF THE CENOZOIC VOLCANISM OF SİMAV
AND SURROUNDING AREA

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ABSTRACT.— It is a known fact that calc-alkaline, transitional and alkaline rocks co-exist in the Miocene-Quaternary continental volcanism of West Anatolia. In Simav and its surroundings, in a very regular pattern, the calc-alkaline nature of the same volcanic rocks is replaced with the transitional and then alkaline basaltic geochemical features in time. This can be best explained by the overburden of the metamorphic basement and later its arching under N-S compression, while the erosion of the overlying material has been accompanied by the rising of the mantle (mantle diapirism) under a rifting mechanism.