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Paleomagnetic Results from NW Aegean Region; Evidence of Neogene Block Rotations

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The Western Aegean region is associated by north dipping subduction in Oligocene, continental collision and Miocene-Pliocene extension. In this area a widespread Miocene volcanism was produced due to the N-S extension. The aim of this study was to predict possible block rotations due to stress variations. It has been shown that both clockwise and counterclockwise rotations obtained from 14 reliable sites which support the idea of individual microblock rotations during Miocene to present. It has been shown that besides clockwise rotations of 30º which are also reported in earlier studies as a result of the exhumation of the Menderes metamorphic core complex, counterclockwise rotations up to 40º are the result of fault-bounded block rotations.