New Paleomagnetic Results from the Sakarya Zone During Mesozoic to Present

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A paleomagnetic study was carried out in the Sakarya Zone from volcanic and sedimentary rocks at 36 sites in the age of Lower Jurassic to Miocene. Stable paleomagnetic direction are obtained from 30 sites. Incremental paleomagnetic fold tests were applied to constrain the age of magnetization. The results showed that a post-folding is characterized for the sedimentary rocks in Paleocene-Eocene and Miocene age, which indicate that the magnetization is acquired after folding. The magnetization for the sedimentary and volcanic rocks in Lower-Middle Jurassic and Late Jurassic-Lower Cretaceous sites showed a positive fold test and a paleolatitude of 39°N and 40°N, respectively. These results showed that the Sakarya zone was close to Eurasia in Lower-Jurassic and Lower Cretaceous.