Paleomagnetic study and tectonic rotation of the Neogene Miura Group, central part of the Boso Peninsula, central Japan.

Masayuki Okamura[1]; Makoto Okada[2]

[1] Environmental Sci., Ibaraki Univ.; [2] Dept. Env. Sci., Ibaraki Univ.

The Miura Group, a Miocene bathyal sequence, is widely distributed in central part of the Boso Peninsula. Rock magnetic and paleomagnetic studies were performed on the Amatsu Formation and the Kiyosumi Formation, which are included in the Miura Group. The results show that an average declination from the Amatsu Formation, deposited between 11.5 and 5 Ma (Kameoka et al., 2002), indicates 52.1 degrees (A95=8.3 degrees) and that from the Kiyosumi Formation, deposited between 5.1 and 4.3 Ma (Tokuhashi et al., 2002), indicates 32.5 degrees (A95=7.3 degrees). In southern part of the Boso Peninsula, the Chikura Group (3-1 Ma) provides an average declination of about 10 degrees (Kotake et al., 1995). These data suggest that the study area had been rotated clockwise about 40 degrees between 5 and 3 Ma.