

Paleomagnetic study in the Nijosan area and the timing of rotation of Southwest Japan

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There have existed several different opinions about the timing of clockwise rotation of Southwest Japan. To clarify the timing of the rotation, we conducted a paleomagnetic study of the well-dated middle Miocene Nijo Group in the Nijosan area over Nara and Osaka Prefectures. As a result, 33 site-mean directions gave a time-averaged group-mean of $D = 352.5$, $I = 53.0$, and $\alpha_{95} = 7.2$. Statistically meaningful paleomagnetic rotation was not observed in the 15-Ma Donzurubo Formation, as well as in upper units of the group. Thus, we conclude that the study area has undergone little vertical-axis rotation since 15 Ma.