Paleomagnetic study of the formation mode of the Macolod Corridor in the southwestern Luzon Island, Philippine

Naoto Ishikawa [1], Masafumi Sudo [2], Eddie Listanco [3]

[1] School of Earth Sciences, IHS, Kyoto Univ, [2] IHS, Kyoto Univ., [3] Geol. Sci., UP

Paleomagnetic study were carried out Pliocene to Pleistocene volcanic and volcaniclastic rocks in the southwestern Luzon Island (SW Luzon), Philippine, in order to clarify formation mode of the Macolod Corridor. Paleomagnetic directions in the Laguna de Bay area north of the corridor indicates no significant tectonic rotation in this area after about 2 Ma. Paleomagnetic directions in the area south of the corridor showed counter-clockwise (CCW) deflection in declination, which implies a CCW rotation after about 4 Ma. In the Macolod Corridor, samples older than about 0.8 Ma also yielded CCW-deflected direction. These results suggest CCW rotation(s) in the area south of the corridor and in the inside area of the corridor as a tectonic motion related to the formation of the corridor.