

## Paleomagnetism and Cenozoic Tectonics of SE Asia.

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SE Asia lies at the intersection of the Euroasian, Indian-Australian and Philippine Sea Plates and is consequently an area of active tectonics. The paleomagnetism of SE Asia remains incompletely established, but major patterns are emerging. A region in the north including Myanmar and Thailand exhibits a history of Cenozoic clockwise rotation and southerly motion. In Peninsular Malaysia, Borneo, Celebes Sea and much of the Philippines counterclockwise rotations predominate with little change in latitude. Much of Borneo, including Sarawak, Western Kalimantan and northern Sabah, has a similar paleomagnetic history. In Sarawak and Western Kalimantan, the timing of the rotations is some  $50^\circ$  between approximately 10 and 25 Ma and a similar amount between 25 and 80 Ma. The counterclockwise rotation of Peninsular Malaysia is some  $40^\circ$ , but the absence of a good Tertiary section on the peninsula leaves the timing of the rotation poorly constrained as post-60 Ma. The different rotational histories of Borneo and Peninsular Malaysia indicate the presence of a boundary between the two regions during the Cenozoic. There may be other boundaries in the counterclockwise rotated region, but the rotation appears to involve microplates and is not simply local rotation. The northern boundary between the clockwise and counterclockwise rotated regions passes through Palawan and continues in a southwesterly direction off Borneo to the Sunda shelf, but the extension to the west is unclear.