

SCHMIDTKE, E., J. ALMASCO, J. R. DUNN, M. FULLER,* R. HASTON, and R. LANDGRAF, University of California, Santa Barbara, CA

Paleomagnetic Results from Sabah and Sarawak, East Malaysia

Borneo lies in a central position in the southeast Asian seas and islands, so its tectonic history is an important aspect of the geologic evolution of the region. We obtained paleomagnetic results from Sabah, north of Borneo, and Sarawak, southwest of Borneo. The results indicate a strong counterclockwise rotation between the late Oligocene and Pliocene, for the region near Kinabalu. Further north, in the Kudat region, a small clockwise rotation was found. Thus, the paleomagnetic results differ in these two regions as does the tectonic strike. Paleomagnetic data from post-tectonic intrusions in Sarawak indicate that no late Cenozoic rotations have occurred. When considered in conjunction with earlier data from Borneo, the results suggest that the island has been deformed heterogeneously, so regions with different tectonic rotations are separated by shear zones, such as the Lupar line and the Kinabalu fault. The tectonic implications of the results will be discussed in the light of other paleomagnetic results from around the South China Sea.