

Chemical and isotope compositions of amphibolites in the Oki belt

Yoji Arakawa[1], Hiroshi Amakawa[2]

[1] Dep.of Geol.,Facul.of Edu.,Saitama University, [2] ORI, Univ. of Tokyo

Chemical and Sr isotope compositions of amphibolites in the Oki-Dogo Islands, western Japan, were determined. The amphibolites fall in the category of (alkaline to) tholeiitic igneous rocks. Incompatible trace element contents of the amphibolites show two different groups, suggesting oceanic island arc basalt (group A) and within-plate basalt (group B). Sr initial ratios of amphibolites are considerably high (0.724-0.733), if the protolith age of the amphibolites is estimated to be 300 Ma. These characteristics of the amphibolites are quite distinct from those in the Hida belt.