

Paleomagnetic study of fragments and matrix in a tuffite dike

Yutaka WADA [1], Chizu Itota [2]

[1] Dept. Earth Sci., Nara Univ. Education, [2] Management Info., Osaka College

We measured remnant magnetizations of juvenile and accidental fragments and their matrix in a tuffite dike to infer their behaviors at the time of emplacement. In results, we obtained average paleomagnetic directions of the declination, inclination, and alpha-95 angles were 2.1, 56.4, and 12.0 degrees, respectively. In addition, most of measured samples, including juvenile and accidental fragments and matrix, show that their remnant magnetic intensities decrease in temperature range over 250-400 degrees Celsius and magnetic directions become unstable. These indicate a possibility that at higher temperature fragments and matrix were moving not to get stable remnant magnetization, and then they were cooled down to 250-400 degrees Celsius when reached to the sampling point.