

Applicability of dating for glacial sediments or tills

Reisuke Kondo[1], Sumiko Tsukamoto[2], Shuji Iwata[3]

[1] Dept. Geogr. Grad. Sci. Tokyo Metropolitan Univ., [2] Dept. of Geogrphy, Tokyo Metropolitan Univ., [3] Department of Geography, Tokyo Metropl. Univ

The timing of past glacial advance has been estimated relatively, as it is difficult to obtain absolute ages. Infrared stimulated luminescence (IRSL) dating method is applicable to various sediments, which have been expose to sunlight before deposition. In the present study, various types of tills were dated by IRSL and compared with independent ages or geomorphologically estimated ages.

The samples were collected from various tills in Hida Mountain Range. Measurements were performed by the fine grain method (Zimmerman, 1971), and the additive dose method was used for calculating equivalent doses. Some of IRSL ages(90ka, 60ka) are in agreement with the independent ages. This indicates that it might be possible to date tills by IRSL dating by classifying the production process of tills.