

Active history of the Itoigawa-Shizuoka Tectonic Line since Early Pleistocene, based on paleomagnetic stratigraphy of sediments

Takeyuki Ueki[1]

[1] Geogr. Sci., Tokyo Metropolitan Univ.

The Iyari Formation in the northern Fossa Magna Region, crops out along the Itoigawa-Shizuoka Tectonic Line Active Fault System (ISTL). It mainly comprises boulder-sized clasts of welded-tuff and granite, intercalated with silt and sand layers totally 50 m thick. Clasts of the Kurobegawa Granite were found in the formation. This fact implies that the Iyari Formation was formed in the Late Early-Pleistocene to Early Middle-Pleistocene. Lower three and the uppermost horizons showed reversed and normal paleomagnetic polarities, respectively. This variation is possibly correlated to the period from the Matsuyama reversed chron to Brunhes normal chron. The location and depositional age of the Iyari Formation indicate that ISTL had been active since Late Early-Pleistocene.