Tephra of the Upper Pleistocene Joso Formation, Shimosa Group in the western Tsukuba Upland, central Kanto Plain

*Daichi Akiyama[1], Hiroko Okazaki[2], Hiroomi Nakazato[3], Shinzou Ooi[4], Toshihiko Sugai[1]

1.Department of Natural Environmental Studies, Institute of Environmental Studies, Graduate School of Frontier Science, The University of Tokyo, 2.Division of Earth Science, Natural History and Institute, Chiba, 3.National Institute for Rural Engineering, 4.Research Institute of Geology and Geoinformation, Geological Survey of Japan

Most of the terraces in the Kanto Plain were formed on and after Marine oxygen-Isotope Stage (MIS) 5e. Palaeo-Tokyo Bay spreaded in MIS 5e was becoming regression gradually. The geomorphic surfaces of MIS 5e were formed by Kioroshi Formation, and the geomorphic surfaces of MIS 5c and MIS 5a were formed by Joso Formation, in the Tsukuba Upland. Joso Formation has been classified by geomorphic surface classification, tephrochronology and sedimentary facies analysis. The purpose of this study is to make the improvement of a time axis in Joso formation from sedimentary facies analysis and tephrochronology targeted for the western Tsukuba Upland over the central Ibaraki Prefecture. The results, 2 to 4 sedimentary units of the marsh and channel facies are recognized Joso Formation in the Ryugasaki Lower surface (Ikeda *et al.,* 1982) , Joso surface (Unozawa *et al.,* 1988) and Joso, Ishizuka surface (Ooi *et al.,* 2013) . Hk-TP tephra (66ka; Aoki *et al.,* 2008) is recognized from Kanto loam Formation. On-Ng tephra (about 85ka; Nagahashi *et al.,* 2007) or On-Pm1 tephra (about 96ka; Aoki *et al.,* 2008) , and so on were confirmed from Joso Formation by the mineral composition and the chemical composition of the glass. It's expected that this study offers essential datum about the landform evolution in surrounding Upland and the Joso Formation study.

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