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HQR023-P07

Room:Convention Hall

Time:May 24 14:00-16:30

## A trial of grasping development of fluvial terraces and hills using OSL dating in Hanno area, Saitama Prefecture

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In Hanno area of Saitama in eastern Japan, fluvial terraces and hills distribute broadly, but detailed dating data and information corresponded with climatic change are only a few. The aim of this study is classification of the river terraces, and establishment of the stratigraphy to elucidate the development of terraces of Late Quaternary in Hanno area. In this area, aeolian deposit known as Kanto Loam, covered terraces and hills thickly. Therefore we applied the OSL dating to aeolian deposit to establish the chronology of Kanto Loam and fluvial landforms. Recently, OSL dating has been expected and applied to elucidate the age of various sediments. We tried to clarify the development of terrace and hill topography using OSL dating in Hanno area, Saitama Prefecture, Japan.

As a result of the trench survey, upper formation of the Tachikawa Loam and fluvial sandy deposits were cropped out. Near the top horizon, Upper Grassy Ash (UG, 12ka) was found out. The result of OSL dating shows linear trend and parallel to an age-depth line determined tephrochronologically. However the difference between two lines is about 8ka. We need to examine the effect of the source and emplacement process of fine-grained quartz, for example volcanic origin, reworking process, etc.

Keywords: Iruma river, fluvial terraces, hills, aeolian deposit, OSL dating, tephra