Japan Geoscience Union Meeting 2015

(May 24th - 28th at Makuhari, Chiba, Japan)

©2015. Japan Geoscience Union. All Rights Reserved.



HCG35-P07

Room:Convention Hall

Time:May 27 18:15-19:30

Special differences of regressive systems during MIS 5e-4 in the Pleistocene Kioroshi and Joso Formations, Shimosa Group

AKIYAMA, Daichi^{1*}; NAKAZATO, Hiroomi²; OKAZAKI, Hiroko³

¹Graduate School of Frontier Science, The University of Tokyo, ²National Institute for Rural Engineering, ³Division of Earth Science, Natural History and Institute, Chiba

Paleo-Tokyo Bay, which the Middle to Upper Pleistocene Shimosa Group was deposited in, repeated appearance and disappearance under the condition of glacio-eustatic sea-level change, Kanto plain. The upper part of the Shimousa Group consists of Kioroshi and Joso Formations, which were deposited during marine oxygen-isotope stage (MIS) 6 to 4. This study analyzed sedimentary facies of the typical regressive systems developed at the inner part of bay and the open sea side, in Kioroshi and Joso Formations, which is distributed the Joso Upland, in southern Ibaraki and northern Chiba Prefectures. As the result, lower shoreface, upper shoreface, tidal inlet, beach, and marsh facies are recognized in the Kioroshi Formations. River and marsh facies are recognized in the Joso Formation. Although similar sedimentary facies are recognized, the inner part of bay and the open sea side have differences in their facies and grain size distributions. Fluvial facies of the inner part of bay consists of mud to pebble, very poorly sorted. Large-scale trough cross-stratification is the predominant sedimentary structure. It shows typical river facies. On the other hand, facies of the open sea side consists of mainly medium-grained to coarse-grained sand, well sorted comparison with the facies of the inner part of bay, and the constituent parts of mud is several percent. Trough cross-stratification shows small-scale, and the iron sands is concentrated into laminae. Such as differences of facies reflect special differences the paleogeography, during the regression. However, the cronocorrelation is needed to reconstruct about the paleogeography.

Keywords: regressive systems, Middle to Upper Pleistocene, Paleo-Tokyo Bay