
[JJ] Evening Poster | H (Human Geosciences) | H-QR Quaternary research

[H-QR04]Quaternary, Diachronic dynamics of human-environment interactions

convener:Mamoru Koarai(Earth Science course, College of Science, Ibaraki University), Toshihiko Sugai(Department of Natural Environmental Studies, Institute of Environmental Studies, Graduate School of Frontier Science, The University of Tokyo), Kiyohide Mizuno(国立研究開発法人産業技術総合研究所地質情報研究部門, 共同), Minoru YONEDA(The University Museum, The University of Tokyo)
 Sun. May 20, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe)
 Humans have attained their specific development by indigenous cultures and evolved through environmental adaptation. The session raises issues of human-environmental interactions, views from diverse changes of climate, ocean, land and biota having made striking influence on humans. It welcomes various fields from human-environment change and their chronometric dating among Quaternary disciplines.

[HQR04-P05]The new perception of Terrain Stratigraphy in the North-east of Musashino upland, Kanto plain : Fossil valley in MIS4

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The topography of the Musashino upland have been described by many studies (Kaizuka, 1964, et al.). Recently, the new idea of topographic classification has been proposed (Endo et al., this meeting).

Musashino upland is known to be an alluvial fan made by the Tama River, but Akabane upland and a part of Hongo upland are extremely flat and unique distribution pattern as the margin of the fan. Kaizuka(1964) suggested these uplands to be like fluvial or delta formed by N to S river like Iruma river or Arakawa river.

Though Akabane and Hongo uplands also have been regarded as M2 terrace but we found out that these uplands can be divided into more using the RCMAP (Suginaka et al., this meeting).

As a result of micro topographical interpretation using the RCMAP of the Akabane upland, the surface of Akabane Upland is characterized by flatness, but can be divided into the lower part (Jyujyo surface; showing meandering pattern) and the higher part. Around the southern part of Akabane upland, between Oji and the Shinobazu Pond, we can recognize the Jyujyo surface on both sides of the lowland of the Yatagawa River. Near Shinobazu Pond, the lower flat surface are clear in Nezu and at Tokyo University Hospital, which was suggested to be M3 by Sakaguchi (1990).

We made about 20 geological profiles crossing the Akabane upland and the valley of Yatagawa, south of Oji, to examine the continuity of Jyujyo surface and the basal topography.

Moreover, we checked the profile of alluvial lowland near Akihabara. A narrow buried valley are found

out, with a gravel layer from -7 to -8 m at the bottom, and filled by Holocene soft sediment.

As a whole, Jyujyo surface, Nezu surface and the narrow valley in the lowland (300m in width) are situated nearly the same direction, having similar relation to M2 terraces and thin sandy deposits including gravel, and nearly the same horizon as Tokyo Pumice in Tokyo University. This suggests a fossil valley of M3 during MIS4 probably existed and formed by a river like Iruma River rather than Arakawa River.