[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-P13]A widespread tephra included Osumilite of the Kazusa Group distributed in the Boso Peninsula, Chiba Prefecture , Japan

*Itoko Tamura[1], Masayuki Utsunomiya[2], Kiyohide Mizuno[2] (1.Department of Geography,Graduate School of Science,Tokyo Metropolitan University, 2.Research Institute of Geology and Geoinformation, Geological Survey of Japan, AIST)

Keywords:Kazusa Group, Widespread tephra, Osumilite, Correlation, Boso Peninsula

The Kazusa Group, widely distributed in the Boso Peninsula is composed of marine sediments at the forearc basin. There is a wealth of stratigraphic geological research and studies regarding this Group, which represents the type stratigraphy of the marine Pleistocene of the Japanese Islands.
In order to characterize the tephra layers with in the lower Kazusa Group, authors investigated the thickness, color, shape of volcanic glass, mineral composition, refractive index of volcanic glass and the majer and trace element composition of volcanic glass. A tephra layer included osumilite in the lower Ohara Formation of the lower Kazusa Group can be correlated with Bnd2-O1 tephra(2.1Ma) of the widespread tephra layer distributed in central Japan. Authors named this osumilite tephra Kobato tephra(KB).
KB is very fine ash layer and white colored. The thickness of this tephra is 6-7cm. This tephra mainly consists of volcanic glass with small amount of hornblende, orthopyroxene and osumilite. The chemical composition of volcanic glass is higher in Al_2O_3, CaO and Sr than those in other Pleistocene tephras. Bnd2-O1 tephra is found in Plio-Pleistocene sedimentary basins in Kinki, Tokai and Hokuriku area. This widespread tepha consists almost entirely volcanic grass, and is characterized by the presence of osumilite as a phenocryst. The age of this tephra is estimated at about 2.1 Ma (Tamura and Yamazaki, 2004). Features of KB are similar to Bnd2-O1 tephra well, and is comparable, so they are correlated.