

## Stratigraphy around Kansai Airport and its properties

# Naoko Kitada[1]; Keiji Takemura[2]; Naoto Inoue[1]; Hiroko ITO[3]; Fujio Masuda[4]; Akira Hayashida[5]; Tohru Danhara[6]; Tsuyoshi Emura[7]

[1] GRI; [2] Beppu Geo. Res. Lab., Grad. Sci., Kyoto Univ.; [3] G.R.I.; [4] Dept. Geol. and Mineral., Grad. Sci., Kyoto Univ.; [5] Dept. Environ. Sys. Sci., Doshisha Univ.; [6] Kyoto Fission-Track; [7] KANSAI International Airport CO., LTD

<http://www.geor.or.jp/>

In Osaka Plain, Pliocene to Quaternary sediment called Osaka Group and terrace sediment are deposited. These are covered with Holocene deposit at the lower plain and around Osaka bay area. This sedimentary basin during Quaternary time is aligned in the central part of Japan (Takemura, 1985). In this basin, thick sedimentary sequences deposited and these are including marine clay deposit. These marine clay deposit are formed at least 15 layers. The stratigraphy of the Osaka Group in the hill areas was summarized on the basis of intercalation of marine clay bed and volcanic ash layers. The stratigraphy of submarine strata at Kansai International Airport is summarized based on correlation of four 400m deep cores obtained during 1994 and 1995, and previous results published by Nakaseko et. al., (1984). In 2007, deep borehole core drilling was carried out at Kansai Airport again. It over 1340m depth and this drilling point is most near central axis in Osaka sedimentary basin. In this study, we are analysis by micropaleontological, tephrochronological and magnetostratigraphical method, and correlated around borehole data. The sequences are called upper group (Kukojima) and lower group (Sennanoki) (Nakaseko et al., 1984). These Kukojima and Sennanoki formations are include marine deposit. In this study, we can analysis deeper part formation and it appeared that deeper deposits are formed fluvial deposit and lacustrine deposit. It means these are non-marine deposit not include marine clay and seems to big lake because of main grain size are silt and mud. The basement rock(granodiorite) are observed at 1328.65m. In this poster, we would like to show the stratigraphy at center of Osaka basin and its characteristics.