

Estimation of basal surface of Holocene based on buried surface at Nakagawa lowland, Central Japan

Yuki Hanashima^{1*}, Katsumi Kimura²

¹Univ.ofTsukuba, Graduate school of Life and Environment Sciences, ²AIST,Geological Survey of Japan

In Japan, Holocene is thickly deposited at coastal plain area concentrating large cities. Holocene is often deposited under groundwater surface, is unconsolidated, and constructs soft-ground. Therefore it is necessary to clarify the precise distributions of Holocene for construction works or earthquake disaster prevention.

This study is aimed to present a method of surface estimation for basal surface of Holocene in consideration of buried surface. The borehole database used in this study is from the Borehole Database for Urban Geology Project of AIST, Geological Survey of Japan. Unlike conventional studies of the basal surface of Holocene, cluster analysis and voronoi diagram are used for quantitative verification of estimated surface. The basal surface of Holocene with obvious boundary of buried surface can be estimated.

Keywords: estimation of geological surface, basal surface of Holocene, buried surface