

Characteristics of Subsurface flexure of Uemachi Fault in the Osaka City area

Keiji Takemura^{1*}, Naoko Kitada², Naoto Inoue², Hiroko ITO², Muneki Mitamura³, Tomoo Echigo²

¹Kyoto University Graduate School of Science, ²Geo-Resarch Institute, ³Osaka City University Graduate School of Science

In Osaka, Uemachi Fault is one of the famous active faults. It is across the center of Osaka plain. Generally, Uemachi fault is located in N?S direction mainly along the Uemachi uphill in the main area of Osaka City. Pliocene to Quaternary sediment Osaka Group and terrace sediment are found to be deposited in the Osaka Plain and Holocene marine clay layers (Ma13) are covered these plains in order to sea level change. Kitada et al (2012) recognized the parallel frontal fault in the western Osaka using borehole data. In this study, geological borehole sampling was carried out in the two areas. UMH22-1 is for Sakuragawa flexure zone and UMH23-1,2 are for the Suminoe flexure brock. We found many tephra layers and correlate the Ma numbers. These top marine clay sediment are decided using 14C dating. The result of this analysis, activity rate of frontal fault is larger than the main existing fault.

In this poster, we would like to show the detail of these studies.

Acknowledgment:This research is funded by the integrated research project for the Uemachi active fault system in FY2011 by MEXT.

Keywords: borehole, deformation, Osaka Group, sedimentary environment, sea level change, tephra