Geophysical explorations along the Gomura and the Yamada fault zone, and its applicability: Part 2 P-wave seismic reflection survey, seismic refraction survey, CSAMT survey, and gravity survey

*Shinsuke Okada¹, Toshifumi Imaizumi², Susumu Sakashita³, Kyoko Kagohara⁴, Shigeru Toda⁵, Nobuhisa Matsuta⁶, Satoru Yamaguchi⁷, Masato Yamamoto³, Mikihiro Imani³, Hitoshi Todokoro³, Yoshikazu Matsubara³

1.International Research Institute of Disaster Science, Tohoku University, 2.Graduate School of Science, Tohoku University, 3.Oyo Corporation, 4.Faculty of Education, Yamaguchi University, 5.Aichi University of Education, 6.Graduate School of Education, Okayama University, 7.Graduate School of Science, Osaka City University

As a part of a research project commissioned by Secretariat of Nuclear Regulation Authority (S/NRA/R), to reveal the subsurface geometry of active fault and geological structure around the Gomura fault zone and the Yamada fault zone, we execute a seismic reflection and refraction survey, S-wave shallow seismic reflection survey, CSAMT survey, high-density electrical resistivity survey, and gravity survey. In this presentation, we demonstrate detail results of P-wave seismic reflection survey, seismic refraction survey, CSAMT survey, and gravity survey. Finally, we summarize applicability and efficiency of these geophysical explorations for the strike-slip active fault.

Keywords: P-wave seismic reflection survey, seismic refraction survey, CSAMT survey, gravity survey, Gomura fault zone, Yamada fault zone