

Gravity anomaly and subsurface structure in and around the Futagawa-Hinagu fault

Koya Shimamura[1]; Shigeki KOBAYASHI[2]; Takashi OKUDA[3]; Shuhei Okubo[4]

[1] Space Earth Information Technology, Kyushu Tokai Univ.; [2] Environment Conservation Sciences, Tokai Univ.; [3] RCSVDM Center, Nagoya Univ.; [4] ERI, Univ. Tokyo

We carried out dense gravity survey in and around the Futagawa-Hinagu fault, which runs across Kumamoto prefecture in central Kyushu from NE to SW, for about one hundred km. Optimum surface density for Bouguer reduction was well estimated by using Fukao's method as 2.50-2.55 g/cm³. Then, detailed Bouguer anomaly map was made by compiling gravity data of (Yamamoto and Shichi, 2004) and (GSJ, 2004). Underground density structure across the fault was determined by applying Talwani's method.