

Array microtremor observation in San Fernando valley, CA, USA

Tomotaka Iwata[1], Hiroshi Kawase[2], Shinichi Matsushima[3], Kenichiro Nagato[4], Hiroe Miyake[1], Haruko Sekiguchi[5], Shunichi Kataoka[6], Shin Aoi[7], Toshimi Satoh[8], Arben Pitarka[9]

[1] DPRI, Kyoto Univ., [2] Grad. School of Human-Environ. Studies, Kyushu Univ., [3] Ohsaki Research Institute, [4] Grad. School of Human-Env. Studies, Kyushu Univ., [5] AIST, GSJ, [6] Shimizu Co., [7] NIED, [8] Izumi Research Institute, Shimizu Corp., [9] URS Greiner Woodward Clyde Federal Services

We conducted microtremor array observation in San Fernando valley, south California, USA, to estimate S-wave structure in the basin. We have already estimated S-wave velocity structure by microtremor array measurements in Sherman Oaks and Santa Monica area, where large damage occurred during the 1994 Northridge earthquake, in 1995. Recently, SCEC proposed the crustal velocity structure model in the south California area. The aim of this observation is to obtain regional variation of S-wave velocity structure in San Fernando valley with referring the new proposed underground structure model. Relationships between earthquake disaster area during the Northridge earthquake with site amplification obtained from S-wave velocity structure will be discussed.