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Site response estimation in the city of Rome

A. Caserta (1), F. Bozzano (2), F. Marra (1), S. Martino (2)

(1) Isitituo Nazionale di Geofisica e Vulcanologia - Rome, Italy (2) Universita' "La Sapienza" - Rome, Italy

We planned a three dimensional array of seismic stations with the aim to investigate the site response in the city of Rome. We installed it in the center of the main sedimentary body of the city: the Tiber valley. The array's geometry has been designed to better study the generation, propagation and reverberation of energy inside the valley. Geotechnical investigations (Down-hole, Cross-hole, CPTE measures, etc.) as well as geological ones (boreholes to study the stratigraphy, geoelectrical prospections, etc.) have been performed in order to both reconstruct the geometry of the near-surface geology and to estimate the body wave velocities. Such geological and geotechnical knowledge has been very useful in numerical simulations of the ground motion.