



Session 30

Seismic site response: case studies, issues and new challenges

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Realistic and robust ground motion estimation for future earthquakes is one of the most challenging problems in seismology and earthquake engineering. In particular, the influence of the local site conditions has been shown to be particularly important for quantifying the level of ground motion. In this context, strong motion and seismological data continue to be primary for earthquake engineering and applied seismology.

Local site effects can strongly affect ground motion amplitude, duration and frequency content and the quantitative and reliable assessment of those phenomena is required for potential future events in a specific zone, for seismic hazard and seismic risk mitigation.

The main goal of this session is to collect contributions of recent advances on local site effects (e.g. basin resonance, topographic effects, nonlinearity, soil liquefaction, slope instability, scattering effects) and corresponding microzonation activities. We also welcome contributions with a special focus of site effect studies for long-term urban planning, land planning and also for emergency management.

This session will also welcome contribution related to the COSMOS (Consortium of Organization for Strong Motion Observation System) International Guidelines Project.