

SSA 2012 Annual Meeting
17-19 April, 2012, San Diego, California
Special Session



<http://www.seismosoc.org/meetings/2012/specialsessions.php>

**Macroseismic Effects in Recent and Ancient Earthquakes
and their Relationship to Ground Motion Parameters**

Man-made constructions exhibit macroseismic effects from earthquakes that are of primary interest for seismologists, civil engineers and, occasionally, archaeologists. In its infancy, modern seismology made use these effects to not only scale the strength of an earthquake but also to deduce source parameters such as the epicenter. Specifically, objects of investigation included such toppled and rotated objects as tombstones, simply structured monuments, and columns. While present-day earthquake locations are achieved by seismic measurements, the link between site-specific ground motions and damaged constructions is still of great importance. The correlative factors, however, are even today not always fully understood. In order to interpret effects of ancient earthquakes on simple structures and buildings, instrumentally observed earthquakes producing similar macroseismic effects offer a chance to refine methods of back calculation of ground motion parameters. The goal of this session is to bring together strong motion and engineering seismologists, civil engineers, geologists, archaeologically interested seismologists and archaeologists to discuss possibilities and limitations of the deduction of ground motion parameters from macroseismic effects. This includes also the study of geological and geomorphologic factors to local rotations. Contributions to methodological developments are encouraged as well as presentations of field cases and data collections.

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