

Analysis of Earthquake Data from the Greater Los Angeles Basin and Adjacent Offshore Area, Southern California

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ABSTRACT

We synthesize and interpret local earthquake data recorded by the Caltech/USGS Southern California Seismographic Network (SCSN/TriNet) in southern California. The goal is to use the existing regional seismic network data to: (1) refine the regional tectonic framework; (2) investigate the nature and configuration of active surficial and concealed faults; (3) determine spatial and temporal characteristics of regional seismicity; (4) determine the 3-D seismic properties of the crust; and (5) delineate potential seismic source zones. Because of the large volume of data and tectonic and geologic complexity of the area, this project is a multi-year effort and has been divided into several tasks.