

New seismic hazard assessment for Central America

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A new study evaluates the seismic hazards for the entire Central America, including specific assessments for six capital cities, with the greatest hazard expected for Guatemala City and San Salvador, followed by Managua and San José, and notably lower in Tegucigalpa and Panamá City.

The study, published in the April issue of the *Bulletin of the Seismological Society of America (BSSA)*, included input from [seismic hazard](#) experts from Costa Rica, Guatemala, Honduras, Nicaragua, El Salvador, Panama, Norway and Spain. All seismic experts from Central American countries, except Belize, agree with the study's assessments.

The paper outlines the work carried out as part of the cooperation project named RESIS II, under the auspices of the Norway Cooperation Agency (NORAD), with a contribution of the Technical University of Madrid (UPM). A new regional seismic catalog and a strong motion database updated up to December 2010 have been developed.

A seismogenic zonation has been proposed for the entire region, considering the three tectonic settings (crust, subduction interface and inslab), with zones defined at a national level and coherent at a regional scale, avoiding discontinuities along the national boundaries.

This is the first study developed in Central America at a regional scale this century and the first done in terms of peak ground acceleration (PGA) and different spectral acceleration values for the entire region.

The study provides new information that is being considered in the revision of national seismic codes and it is also supported by the Coordination Centre for Natural Disasters Prevention in Central America (CEPREDENAC).

More information: "A New Evaluation of Seismic Hazard for the Central America Region," by M. B. Benito, et al., *Bulletin of the Seismological Society of America*

Provided by Seismological Society of America

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