

Título: Hybrid loss assessment curve for Colombia: A prospective and retrospective approach

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RESUMEN

Countries prone to seismic hazard need to assess the expected risk as a permanent activity in their financial plan; otherwise, they will experience a lack in the information required for the application of disaster risk reduction policies. In this article, a risk assessment methodology is proposed that uses, on the one hand, empiric estimations of loss, based on information available in local disaster data bases, allowing to estimate losses due to small events; on the other hand, it uses probabilistic evaluations to estimate loss for greater or even catastrophic events for which information is not available due the lack of historical data. A "hybrid" loss exceedance curve, which represents the disaster risk in a proper and complete way, is thus determined. This curve merges two components: the corresponding to small and moderate losses, calculated by using an inductive and retrospective analysis, and the corresponding to extreme losses, calculated by using a deductive and prospective analysis.



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PALABRAS CLAVE	Hybrid loss assessment curve, Colombia

COMPONENTES DE LA EVALUACIÓN

AMENAZA	<ol style="list-style-type: none"> 1. Tipo de amenaza: sismo 2. Métricas de intensidad: Peak Ground Acceleration (PGA) 3. Escala/resolución: Nacional 4. Resultados: - 5. Localización: Colombia 6. Metodología: - 7. Períodos de retorno (años): 475
VULNERABILIDAD	<ol style="list-style-type: none"> 1. Tipo de vulnerabilidad: Física 2. Metodología: - 3. Tipología estructural: - 4. Representación: -
EXPOSICIÓN	<ol style="list-style-type: none"> 1. Tipo exposición: Edificaciones 2. Portafolios: - 3. Localización geográfica: Colombia 4. Valor de reposición total: - 5. Área expuesta (m2): -
RESULTADOS DE RIESGO	<ol style="list-style-type: none"> 1. Modelo utilizado: Comprehensive Approach for Probabilistic Risk Assessment (CAPRA) 2. Métricas de riesgo: Pérdida Anual Esperada (PAE), Pérdida Máxima Probable (PML) 3. PAE: 1.8 ‰ Colombia 4. PML: 100, 250, 500, 1000, 1500 años de Período de retorno 5. Representación del riesgo: Curva de excedencia de pérdidas