

Assessing How Well Earthquake Hazard Maps Work

Assessing How Well Earthquake Hazard Maps Work

Joseph Lilek (jlilek@americangeosciences.org)

3/1/2017

Are seismic hazard maps getting a fair shake? Earthquake risk is notoriously difficult to forecast, but the maps are improving, and seismologists are learning key lessons from meteorology and an even more unlikely source: baseball. In the March issue of EARTH Magazine, a group of experts provides candid insight into the dual challenge of designing seismic hazard maps and testing their effectiveness.

While meteorologists can evaluate their weather models every day, earthquake scientists have fewer opportunities to test their maps. However, by relying on historical data and analyzing multiple metrics, mapmakers can still relay valuable information about seismic hazards. The authors make the case that seismic hazard should be assessed holistically: In the same way that a great baseball player can be an exceptional hitter but a mediocre fielder, an area with high seismic hazard could anticipate relatively low-magnitude earthquakes but contain a dense population. For more information (and better metaphors) read the full story in EARTH Magazine: <https://www.earthmagazine.org/article/assessing-how-well-earthquake-hazard-maps-work-insights-weather-and-baseball>.

Curious about the seismic hazard in your community? Read last month's feature on Temblor, a seismic hazard app, at <https://www.earthmagazine.org/article/temblor-app-brings-home-your-seismic-hazard>.

The March issue of EARTH Magazine is now available online. Read how present-day air pollution in China has revealed the chemical processes behind the "Great Smog" of London in 1952. Or read how fossil soils found in South Africa's Barberton greenstone belt are implying that life on land started some 300 million years earlier than previously thought. For these stories and more, subscribe to EARTH Magazine.

###

Keep up to date with the latest happenings in Earth, energy and environment news with EARTH Magazine online at www.earthmagazine.org. Published by the American Geosciences Institute, EARTH is your source for the science behind the headlines. Now available on Kindle.

###

The American Geosciences Institute is a nonprofit federation of geoscientific and professional associations that represents more than 250,000 geologists, geophysicists and other earth scientists. Founded in 1948, AGI provides information services to geoscientists, serves as a voice of shared interests in the profession, plays a major role in strengthening geoscience education, and strives to increase public awareness of the vital role the geosciences play in society's use of resources, resiliency to natural hazards, and interaction with the environment.

Like us on Facebook, and follow us on LinkedIn and Twitter!
