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A New Worry for Insurers: Weather-Generated Earthquakes

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When it comes to natural disasters, the insurance industry pretty much has it nailed down when it comes to cause and—especially—effect, but a new piece of research on earthquakes could result in major changes to the way insurers view and price risks in earthquake-prone areas.

According to a piece in *USA Today*, research published recently in the journal *Nature Geosciences* says the atmospheric pressure changes associated with some weather systems could help trigger earthquakes, landslides, volcanic eruptions and even the movement of glaciers.

Study lead author William Schulz of the U.S. Geological Survey in Denver said the risk depends on the speed of the weather systems moving over quake-prone regions, the article noted. Rapidly moving areas of low atmospheric pressure (storms) could trigger certain types of slides and quakes. During these periods of low pressure, when less force is exerted upon the ground, upward movement of air and water molecules in the soil would serve to reduce the friction that usually holds the soil or rocks in place, potentially leading to landslides and earthquakes.

And that's not all. Even during periods of unusually high atmospheric pressure (calm, quiet weather), "positive pressure" could also result in destabilization that would trigger landslides and earthquakes, the researcher said. According to *USA Today*, this was the second peer-reviewed study published this year to put forward a relationship between earthquakes and weather.

If this idea has scientific legs, it signals a major shift in the way disaster models will be constructed to evaluate risk and forecast damage for both earthquakes and storms. It could mean that storm-prone areas such as the U.S. Midwest might be greater earthquake risks, and that insurance premiums in such areas could jump significantly. Of course, some areas might be deemed too "calm," and thus also at risk for quakes. Then again, I see this as a great step forward in more precisely identifying risks and pricing them, and I'm sure that disaster modelers are working furiously at trying to incorporate this new information.

It's only a matter of time, however, before someone tries to link these findings up to climate change. Never mind that there is no proven correlation between climate change (slight as it has been) to the frequency or intensity of hurricanes and other storms. Now the anthropogenic global warming crowd will not only blame mankind for what they believe will be a precipitous rise in sea levels, but they will also point the finger at the carbon-dioxide-spewing industrialized world for every major earthquake that occurs. I bet Al Gore is already writing a book about this; working title: "Global Warming Has Me All Shook Up." Catchy title, don't you think? It could even be a Broadway play with music by Elvis Presley.

We can only hope that cooler scientific heads will prevail, and that we'll see level-headed information on this new idea, instead of fear-fueled political rhetoric. I have to admit, however, that I am not terribly optimistic about a positive outcome.

http://www.insurancenetworking.com/blogs/insurance_technology_global_warming_catastrophe_modeling-23586-1.html