

Mexico's Pacific coast no stranger to earthquakes

March 20 2012, By ALICIA CHANG , AP Science Writer

(AP) -- A powerful earthquake Tuesday that centered along the Pacific coast of southern Mexico occurred in a region with a history of unleashing damaging jolts, scientists say.

Since 1973, the seismically active coast has been rocked by 15 major quakes magnitude-7 or larger. The deadliest occurred in 1985 when a magnitude-8 struck, sending shock waves to Mexico City that killed thousands.

"It's a very active zone," said Stanford University geophysicist Greg Beroza, who has done field work in the area.

The latest quake was smaller - with a preliminary magnitude of 7.4 - and struck about 300 miles south of the 1985 quake at the boundary where the Cocos plate dives beneath Mexico. Dozens of homes buckled near the epicenter and shaking was felt in Mexico City, where high-rises swayed and panicked residents streamed into the streets.

Unlike in 1985, Tuesday's quake did not severely damage the capital, mainly because it wasn't as large and did not release as much energy. Since Mexico City was built on an ancient lakebed, long periods of shaking from the 1985 temblor amplified the destruction. That quake destroyed 400 buildings and damaged thousands more.

The latest jolt "wouldn't have been nearly as effective at generating those deep bass tones" that caused the damage seen in 1985, USGS

seismologist Susan Hough said in an email.

As governments and residents tally the damage, scientists warned about aftershocks. At least half a dozen, the largest recorded at magnitude-5.1, have already rattled Mexico City and the borders of Oaxaca and Guerrero near the epicenter.

"Any time there's a big earthquake, prepare for more," said seismologist Kate Hutton of the California Institute of Technology. The shaking "will go on for weeks."

More information: U.S. Geological Survey:
<http://earthquake.usgs.gov/>

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