

Sunday's 7.2 quake in Baja California may still pose a threat of large aftershocks

Marcus Torrey, UCLA Daily Bruin, 4-8-10

Four days have passed since a 7.2 magnitude earthquake rocked Baja California, and while no major aftershocks have occurred, the worst may be yet to come.

The Easter earthquake, which was responsible for two deaths in addition to a considerable amount of property damage, could still potentially trigger another earthquake.

Sunday's earthquake occurred on a family of fault lines that continue up into Southern California and eventually merge with the San Andreas fault system, said David Jackson, a UCLA professor of geophysics.

"Mechanically, the earthquake down in Mexico could put stress on the Imperial fault, which could put stress on the San Andreas fault," Jackson said. An earthquake on either fault line would be felt in the Los Angeles area, Jackson said. The Imperial fault, located in Southern California near the Mexico border, and the San Andreas fault are both right-lateral strike-slip faults, meaning if two people were standing on either side of the fault and a slip were to occur, they would both see each other move to their respective rights.

The Laguna Salada fault, which is the most likely culprit for Sunday's earthquake, also happens to be a right-lateral strike-slip fault located near the Imperial fault. Jackson said the similarities between these three make it easier for them to trigger each other. Despite the similarities, Jackson said people should breathe a little easier now that a few days have passed, since the probability of an earthquake being triggered by the one in Baja California decreases day by day.

However, he warned that the low probability will remain present for a long time and cited the 1992 Landers earthquake as an example in which an earthquake of a similar magnitude happened 30 miles away some years later, in 1999. "It is believed there was a connection between the two, even though they were seven years apart," Jackson said.

Although earthquakes have the ability to trigger others, Jackson said he believes the recent earthquake in Baja California, as well as the ones in Haiti and Chile, are all unrelated.

"(Sunday's) was a magnitude 7 earthquake, and you get one of that magnitude on Earth about every three weeks," he said.

In the event an earthquake is triggered in Southern California, UCLA spokesman Phil Hampton said, the university has an extensive response plan for such large-scale emergencies.

David Burns, the emergency preparedness manager at UCLA, said that should an earthquake occur, students are encouraged to stay inside the building and take cover under something.

"One of the problems we have on campus and in the residences is that people don't know what to do in the event of an earthquake," Burns said. "If you try to leave the building, ... you're more likely to trip (and hurt yourself) or be hit by debris."

Burns said UCLA has a Disaster Initial Response Team, which has pre-assigned duties for each part of the

campus in the case of an emergency.

“We’re one of the few universities (in California) that have that kind of detailed plan,” he added.

While Hampton encouraged students to read the UCLA Emergency Response Plan on the school’s Web site, he said each crisis is different, and the circumstances of such an emergency would dictate the kind of response given.