

New San Andreas Fault study released, shows that 'major' quake is overdue

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More earthquakes have occurred along the famed San Andreas fault over the past 700 years than previously thought, but an extended lull indicates that a major temblor could happen soon, according to a study released today.

The study, conducted by researchers at UC Irvine and Arizona State University, found that large ruptures have occurred as often as every 45 to 144 years along the Carrizo Plain portion of the fault about 100 miles northwest of Los Angeles.

That's a sharp departure from previous estimates that major quakes occurred along the fault every 250 to 400 years.

The last large quake, however, was in 1857, more than 150 years ago.

"If you're waiting for somebody to tell you when we're close to the next San Andreas earthquake, just look at the data," said UCI seismologist Lisa Grant Ludwig.

She said the study should serve as a wake-up call to Southern California residents who may have become complacent about the risk of quakes along the fault the line. She said people should have earthquake-preparedness kits ready and families should develop emergency plans.

While the UCI-ASU study found that temblors occurred much more frequently, it also determined that not all of the quakes were as strong as originally thought, but they still ranged between magnitude-6.5 and 7.9.

"We've learned that earthquake recurrence along the San Andreas fault is complex," said Ramon Arrowsmith, geology professor at ASU. "While earthquakes may be more frequent, they may also be smaller. That's a bit of good news to offset the bad."

Ken Hednut, a geophysicist with the U.S. Geological Survey, said the researchers work was rigorously field-checked by scientists.

"I believe they've done a really careful job," he said. "When people come up with new results challenging old notions, others need to see the evidence for themselves."

The study found that the last major quake along the fault was the magnitude-7.8 Fort Tejon quake in 1857.

"People should not stick their heads in the ground,"

Ludwig said. "There are storm clouds gathered on the horizon. Does that mean it's definitely going to rain? No, but when you have that many clouds, you think, 'I'm going to take my umbrella with me today.' That's what this research does: It gives us a chance to prepare."