

Earthquake swarm puts California areas on edge

August 28 2012

(AP)—A magnitude-4.2 earthquake rattled communities 100 miles (160 kilometers) east of San Diego on Monday night, despite observations from earthquake experts that a series of small to moderate earthquakes seemed to be slowing down and getting smaller in magnitude.

Earthquakes are unpredictable, according to U.S. Geological Survey Geophysicist Shengzao Chen, and prior to the 7 p.m. quake, a slowing seemed to be in effect with most of Monday's [temblors](#) under [magnitude](#)-2.5, and occurring in intervals of no greater than 30 minutes.

On Sunday, a swarm of earthquakes shook Imperial County on Sunday and were felt in surrounding counties. Most were minor, but two registered at magnitude-5.5 and magnitude-5.3.

Scientists say the aftershocks and jolts could last for days.

No injuries were reported in the region, which has a long history of such earthquake swarms.

"The type of activity that we're seeing could possibly continue for several hours or even days," U.S. Geological Survey geophysicist Robert Graves said.

The [seismic activity](#) is not unusual, but scientists have puzzled over the cause. The last significant swarm occurred in 2005, when a thousand quakes, the largest at magnitude-5.1, shook the south shore of the [Salton](#)

[Sea](#). In 1981, a cluster of quakes hit a region five miles (eight kilometers) to the northwest of Sunday's sequence, with the largest measuring a magnitude-5.8. The region was very active in the 1960s and 1970s.

"They seem to light up and turn off for reasons we don't understand," USGS seismologist Susan Hough said.

Despite the shaking, the swarms have not triggered any significant quake in the past, Hough said.

The quakes pushed 20 mobile homes at a trailer park off their foundations, rendering them uninhabitable, said Maria Peinado, a spokeswoman for the Imperial County Emergency Operations Center. A red-tile roof apparently collapsed and landed on a wooden fence.

Sporadic power outages, at one point affecting 2,500 Imperial Irrigation District customers, also prompted authorities to evacuate 49 patients from one of the county's two hospitals, Peinado said. Police also received numerous calls about gas leaks and water line breaks.

"It's not uncommon for us to have earthquakes out here, but at this frequency and at this magnitude it's fairly unusual," said George Nava, the mayor of Brawley, a town of 25,000.

"And the fact that the aftershocks keep coming are a little alarming," he said.

At the El Sol Market, food packages fell from shelves and littered the aisles.

"It felt like there was quake every 15 minutes. One after another. My kids are small and they're scared and don't want to come back inside,"

said Mike Patel, who manages the Townhouse Inn & Suites.

A TV came crashing down and a few light fixtures broke inside the motel, Patel said.

The first quake, with a magnitude of 3.9, occurred at 10:02 a.m. on Sunday. The USGS said more than 300 aftershocks struck the same approximate epicenter.

Some shaking was felt along the San Diego County coast in Del Mar, some 120 miles (190 kilometers) from the epicenter, as well as in southwestern Arizona and parts of northern Mexico.

USGS seismologist Lucy Jones said [earthquake](#) swarms are characteristic of the region, known as the Brawley Seismic Zone.

"The area sees lots of events at once, with many close to the largest magnitude, rather than one main shock with several much smaller aftershocks," Jones said.

Sunday's [quake](#) cluster occurred in what scientists call a transition zone between the Imperial and San Andreas faults, so they weren't assigning the earthquakes to either fault, Graves said.

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