Big-quake activity not unusual, scientists say

John Cote, San Francisco Chronicle, 4-15-10

First Haiti, then Chile, Mexico and now China - all pummeled by major earthquakes in just over three months.

As a seemingly steady stream of devastating scenes play across television screens, computer monitors and newspapers pages, many wonder if earthquakes are suddenly becoming more common.

The answer, according to the U.S. Geological Survey, is no.

Worldwide, there have been an average of 16 magnitude 7.0 or greater earthquakes - the size that seismologists define as major - each year since 1900, according to the USGS.

The six major earthquakes that have struck in the first four months of this year may be just above average, but 2010 is still "well within the normal range," USGS researchers found.

"It's slightly above average, but (earthquake activity) is not something that happens very close to an average," said Andrew Michael, a seismologist for the USGS in Menlo Park. "You can find four-month periods where there is only one magnitude 7, and then you can find even more during another period."

There is considerable variability from year to year as well. Some years have had as few as six major quakes, most recently in 1989, while there were 32 big temblors in 1943, the federal agency found.

The recent earthquakes have drawn particular attention for a variety of reasons, including that they've struck near populated areas rather than the middle of the ocean, Michael said. The tremendous loss of life in Haiti, the sheer size of the Chile quake and the U.S.-Mexico border quake's impact on both sides of the demarcation line all played roles in the amount of media attention they received, he said.

"You can go back and find very large earthquakes and essentially no one feels them anywhere," Michael said. "Those are the quakes that don't get covered."

On Dec. 23, 2004, for example, an 8.1-magnitude earthquake - larger than San Francisco's devastating 1906 quake - rocked a point in the ocean off of Macquarie Island, located almost halfway between New Zealand and Antarctica. Few, beyond scientists, took notice, Michael said.

He also dismissed the idea that the current earthquakes could affect future seismic activity.

"Does it mean anything for what's going to happen in the future?" Michael said. "To that we say, 'No.'"