Geologists explain cause of hole in Guatemala

Thursday, June 3, 9:12 a.m. MEXICO CITY, June 3 (EL UNIVERSAL) .- The most likely reason why some gaps were opened in the center of Guatemala after Tropical Storm Agatha, would be that the subsoil has a system of limestone caves that collapsed by heavy rains, experts explained.

Part of the city must be built on land drilling, a “karst” system, which was triggered by heavy rains in some areas collapsed, said geologist Roberto Rodriguez, the Geological Survey of Spain's El Pais newspaper.

"In a karst, the field consists of limestone that over time will dissolve by the action of water, creating tubes (galleries) and caves, that when partial collapse resulting in sinkholes calls," the paper said in its Internet portal Rodríguez denied that the earthquake faults and volcanic tunnels are the source of the tunnels because they are a much greater depth.

Although it is probable that the eruptions refill the system with volcanic ash was detected preventing instability of the land and built over.

The Valley of Guatemala City is partly filled with pyroclastic (volcanic debris) and is below the buildings of the extinct volcanoes Jose and El Naranjo, according to an article by Carlos L.Perez, published last year in the Geological Magazine of Central America.

Geologists who have examined the phenomenon say their perfect circular shape suggests the prior existence of underground caves, but the exact cause of the hole formed remains a mystery.

"I can say what is not, says David Monterroso, engineer and geophysicist at the National Agency for National Disaster Guatemala.It is not a geological fault, nor the product of an earthquake. That's all we know. To find out more we have to go down [into the hole], " quoted in the Spanish newspaper ABC.

These holes form in places where the subsoil is rich in limestone, rock salt and other soluble rocks and therefore dissolve easily in water.

In Florida, Texas, Alabama, Missouri, Kentucky, Tennessee and Pennsylvania, there are often presented these phenomena, according to data released by the Department of Geological Survey of the United States.

However, the dimensions of the hole in Guatemala are much higher than average.

In addition, while other holes are opened gradually, as the ground erodes by moisture, the hole in Guatemala is part of the most dangerous category, which opened suddenly and without notice.

In Mexico City several tunnels have been opened causing accidents or affecting housing.

The most recent was in Circuito Interior, although they tend to be other subsidence and cracks more often in Iztapalapa and Alvaro Obregon.

- http://mx.news.yahoo.com/s/03062010/90/entretenimiento-geologos-explican-causa-boquete-guatemala.html