

Scientists drill quake hole two miles deep

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Geologists are drilling miles into the Earth to prepare for an earthquake such as the 7.9 magnitude quake that struck San Francisco April 18, 1906.

The project is called the San Andreas Fault Observatory at Depth, or SAFOD, and it's designed to learn more about California's San Andreas Fault, National Geographic News reported Tuesday.

The scientists last year drilled a 7-inch-wide borehole sideways through the fault zone at a depth of about 2 miles near Parkfield, Calif.

William Ellsworth, U.S. Geological Survey seismologist, told NGN the goal is to have SAFOD's instruments in a section of the fault that breaks.

"That's why we go into the ground -- to be inside the earthquake machine where the action starts," Ellsworth said, noting the ambient temperature at two miles beneath the ground is about 257 degrees Fahrenheit.

The final instruments will be placed into the borehole next year and then scientists will be able to measure even small, slippage and changes in water pressure in the fault-zone rocks.

Even if it's not determined whether earthquakes are predictable, Zoback told NGN the team expects to at least learn much about how earthquakes occur.

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