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### **Grant will fund study of Earth's plates**

PASADENA - Caltech has established the Tectonics Observatory with a \$13,254,000 grant to provide an explanation of the way the Earth's crust changes over time, including from a few tens of seconds to millions of years.

Under the direction of Jean-Philippe Avouac, a Caltech geology professor, the observatory will focus on major field studies at a few key plate boundaries in western North America, Central America, Taiwan, and Sumatra. It will be a research and education center.

Examples of questions that would fall under the new observatory's realm of study are: What controls earthquakes? What causes the sharp movements in speed and direction that tectonic plates sometimes undergo?

Much of the grant money will go toward the purchase of new technologies that will allow scientists to more accurately measure movements in the Earth's crust and image the Earth's interior in greater detail.

"We hope to breed a new generation of Earth scientists," Avouac said in a written statement. "The Tectonics Observatory will offer students an exceptional environment with access to all the modern techniques and analytical tools in our field, along with the possibility of interacting with a group of faculty with an incredibly diversified expertise."

The Gordon and Betty Moore Foundation provided the grant.