Transportable Seismic Network:

Imaging the Earth's Interior

earthscope

www.earthscope.org

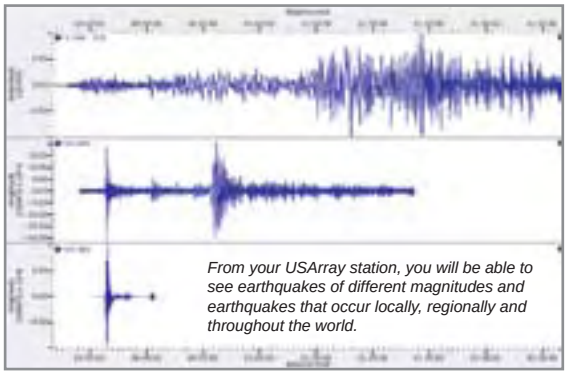
V0407

EarthScope is installing a dense array of seismometers across the continental United States and Alaska. The seismometers will record earthquakes that occur locally, regionally and throughout the world to produce high-resolution images of the Earth's interior and to study the origin and characteristics of earthquakes and earthquake faults. EarthScope scientists will integrate these images with other types of geological data to address unresolved issues of the continental structure, evolution, and dynamics.

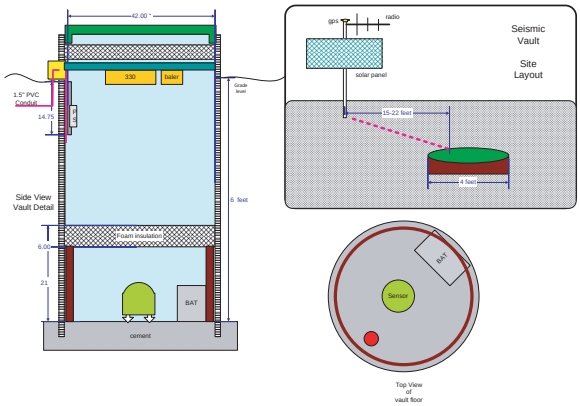
a: Sumatra - M. 9.3
December 26, 2004

b: Japan - M. 7.0
November 28, 2004

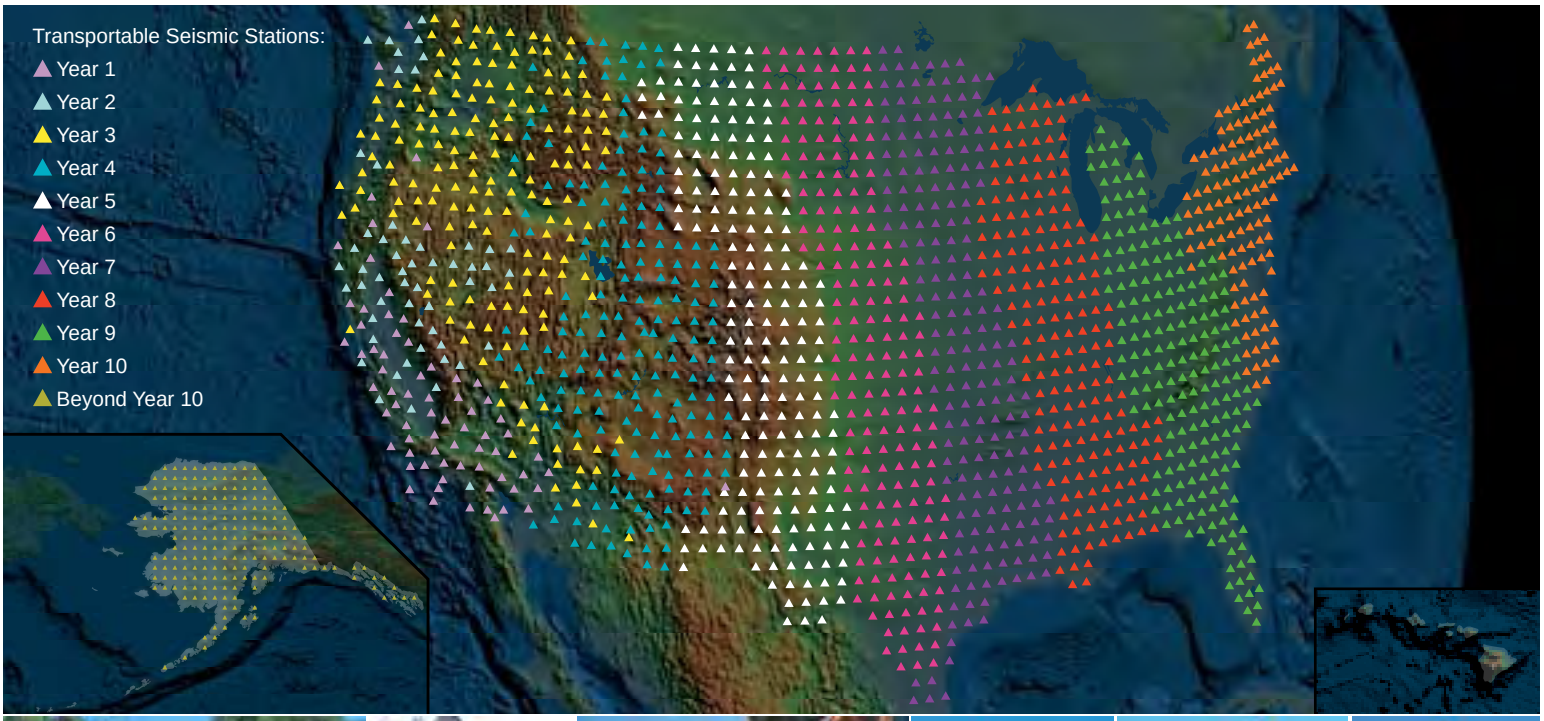
c: Parkfield, CA - M. 6.0
September, 28, 2004



From your USArray station, you will be able to see earthquakes of different magnitudes and earthquakes that occur locally, regionally and throughout the world.



The array will consist of 400 transportable broadband seismic stations that will advance across the country in a roll-along fashion. The stations will have an average residence time of 18-24 months and occupy 2000 locations over a period of 10-12 years. With a station spacing of ~70km, the array will enable scientists to gain new insights into the earthquake process and to generate 3-D images of the Earth from the crust to the core.



For more information, contact usarray@iris.edu • 1-800-504-0357 (tel/fax)