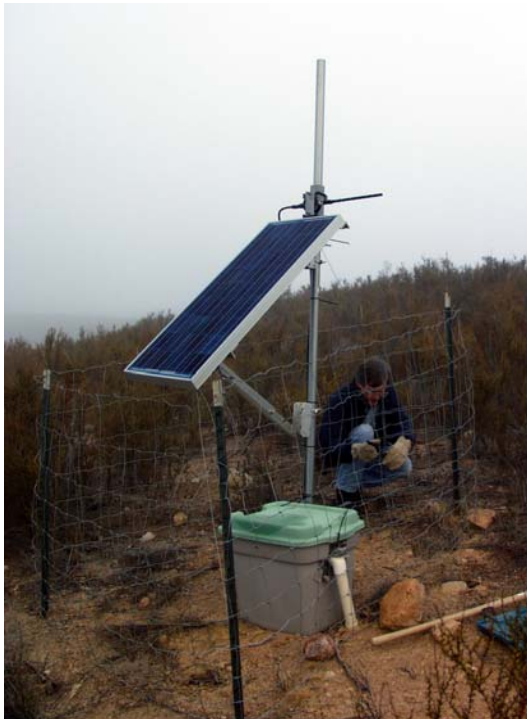


## What does a seismic station look like?

A seismic station includes a seismometer which records small ground vibrations and a power supply. At most stations we prefer to connect to existing 110 power, if this is not possible we will use solar cells and batteries as shown in the photograph below. To protect the equipment from animals we often surround it with a wire fence.



## Thank you!

We would like to thank all those helping us with this project. Whether it is allowing us to locate a station on your land, assisting in the installation, or watching over the equipment for the duration of the experiment – thank you, it would not be possible to further our understanding of the Earth without your help.



If you have any questions or comments about the project please contact:

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## Oregon Array for Teleseismic Study

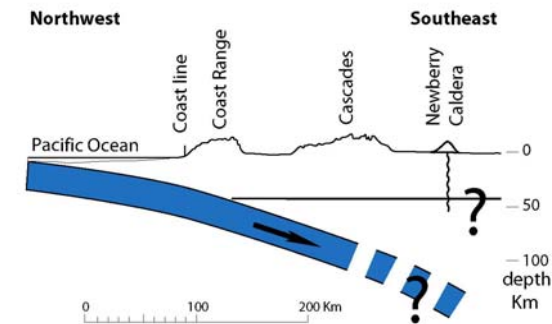


The Oregon Array for Teleseismic Study (OATS) is a scientific project designed to investigate the structure of the Earth beneath Oregon. It is being conducted by researchers at the University of Wisconsin, Madison in cooperation with Oregon State University in Corvallis.



## Why Oregon?

Researchers are interested in the structure beneath Oregon for two reasons. Firstly, off the Oregon coast a tectonic plate (the Juan de Fuca plate) is sinking beneath North America. Earth scientists think the sunken plate may still be beneath Oregon so they will use the recorded earthquakes to see where the plate is going. Secondly they will investigate the structure beneath the Newberry Caldera in central Oregon in an effort to understand what causes it to erupt. The project builds on an experiment using similar instruments that occurred in the region 10 years ago.



The figure above shows the sinking Juan de Fuca plate beneath the Coastal Ranges and the High Cascades in Oregon. The question marks show the regions of the Earth we will be studying with this project.

The project is deploying twelve seismic stations for one to two years across Oregon (red flags on map). The stations are passive and simply record ground vibrations, but they are very sensitive meaning they can record earthquakes from all over the world. By looking at the recordings of these global earthquakes researchers can study the structure of the Earth to a depth of about 300 miles.

