

What's Inside the Earth?

Using Evidence to Create a Model

This graphic illustrates the connection between seismic waves recorded from an example earthquake and our current model of Earth's layered interior.

A Simplified Model of Earth's Layers

Energy released by earthquakes travels as seismic waves through the Earth. Seismic waves are reflected and refracted at boundaries between different materials. These paths, and the internal structure shown, are inferred from the seismic evidence collected from many earthquakes.

Seismic Evidence Reveals Earth's Interior

Below, each "trace" shows the actual ground motion caused by seismic waves that were recorded at stations around the world. Seismologists compare seismic wave arrival times and amplitudes to infer the structure of Earth's deep interior.

