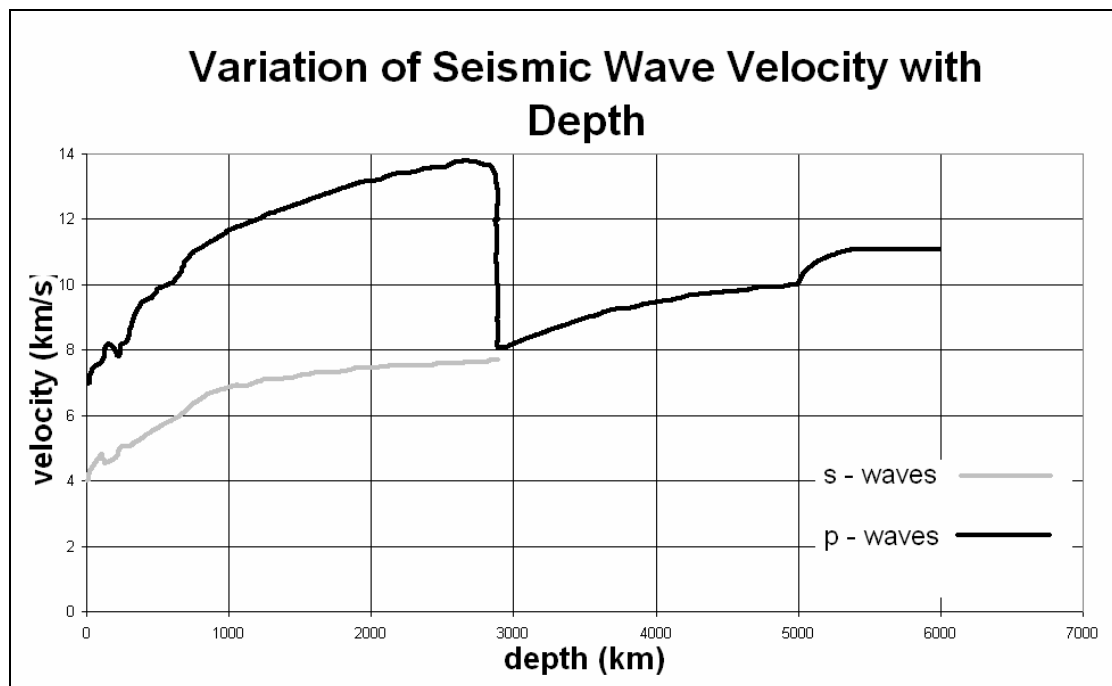


Lesson 14: Journey to the centre of the Earth

Plenary



Questions

- 1 Which waves (S or P) travel faster? Give the initial velocity of each.
- 2 At what depth do S-waves stop suddenly and P-waves slow down suddenly? Suggest why this happens?
- 3 Estimate how much the P-wave velocity changes at depths from 3000 to 5000 km.
- 4 What happens to the P-wave velocity at about 5000 km? Suggest what feature of the Earth's interior could explain this.
- 5 The velocity of both types of waves increases steadily between depths of 1000 and just less than 3000 km. What does this tell you about the density of this part of the Earth's interior?
- 6 From about 5400 km the velocity of P-waves does not rise anymore. Think of a reason for this.

Homework

Prepare a short report which lists the possible causes of earthquakes and where earthquakes have occurred in the last two centuries. Include in your report any way of predicting or preventing earthquakes.