



Interpreting Seismic Wave Data

Procedure

1. Use the graph in Figure 11 in your textbook to determine the difference in arrival times for primary and secondary waves at the distances listed in the data table below. Two examples are provided for you.
2. Use the graph to determine the differences in arrival times for the other distances in the table.

Data and Observations

Table 1

Wave Data	
Distance (km)	Difference in Arrival Time
1,500	2 min, 50 s
2,250	
2,750	
3,000	
4,000	5 min, 55 s
7,000	
9,000	

Analysis

1. What happens to the difference in arrival times as the distance from the earthquake increases?

2. If the difference in arrival times at a seismographic station is 6 min, 30 s, how far away is the epicenter?
