

Reflection seismic 1 script

Educational Material

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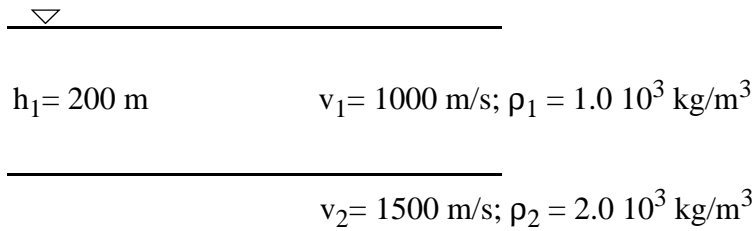
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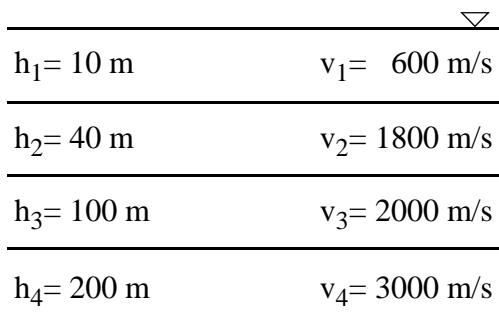
Exercise for Reflection seismic 1 - Excercise 1 (05.11.2001)

(1) Given is the following horizontally layered medium:



- (a) Calculate the reflection and transmission coefficients (R , T , E_R und E_T) for the vertically travelling P waves.
- (b) Calculate the critical distance x_{crit} , the crossover distance x_{cross} and the t_0 -time.
- (b) Construct a travelttime diagram (direct Wave, Reflection and Refraction).

(2) Given is the following layered earth.



h_i is the height of each layer

Determine the RMS-velocity for each layer.

Determine from the RMS-velocities the interval velocities for each separate layer

Hand in at 19.11.2000

Questions:

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