

# Reflection seismic 1 script

## **Educational Material**

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## **Exercise for Reflection seismic 1 - Exercise 4 (14.01.2002)**

The figure shows a single shot (marine Seismics) with several reflections.

Hydrophone distance 25 m

Number of Hydrophones: 180

Offset for the first trace: 252 m (last trace 4727 m)

- (a) Identify the different reflections in this dataset. (primaries and multiples) and show their travel path
- (b) Calculate the velocity of the direct wave traveling in the water
- (c) Carry out a velocity analysis with the  $t^2-x^2$ -Method for the primary reflections.
- (d) Construct a velocity model with interval velocities using Dix's formula.

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### **Questions:**

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4752 m

Abstand der Spuren 25 m

252 m

0

50

100

150

0

1

2

3

4

5

TWT / s

