

## Exercise 4 of the Lecture "Full waveform inversion"

# A 'BLIND' FWI TEST

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### Goal

In this exercise, we perform a 'blind' FWI test on a numerical data set.

### Information about the cross-well data

Source location: (1500, 0), (1550, 0), (1600, 0), (1650, 0), ..., (3450, 0), (3500, 0) m

Receivers' location: (1200, 1000), (1250, 1000), (1300, 1000), ..., (3800, 1000) m

Recording time and sampling rate: 1.200 s, 1 ms per sample

Format of the data: unformatted matrix with a size of  $53 \times 1200$

Use *dlmread* (for text file) or *xlsread* (for excel file) to input data into matlab.

### Tips may help you

1. Source-time-function inversion is required
2. The application of a multi-scale strategy could be beneficial