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 53×1200 Use *dlmread* (for text file) or *xlsread* (for excel file) to input data into matlab.

Tips may help you

- 1. Source-time-function inversion
- 2. Multiscale strategy
- 3. Use only part of the data for inversion

Exercise

A discussion will be made during the webinar on 09.02.2021. Present your final result on the seminar of applied geophysics group at **2 p.m. on 19.02.2021**.