

Project 4

Model Building with Full Waveform Tomography – Processing Data from TPAO

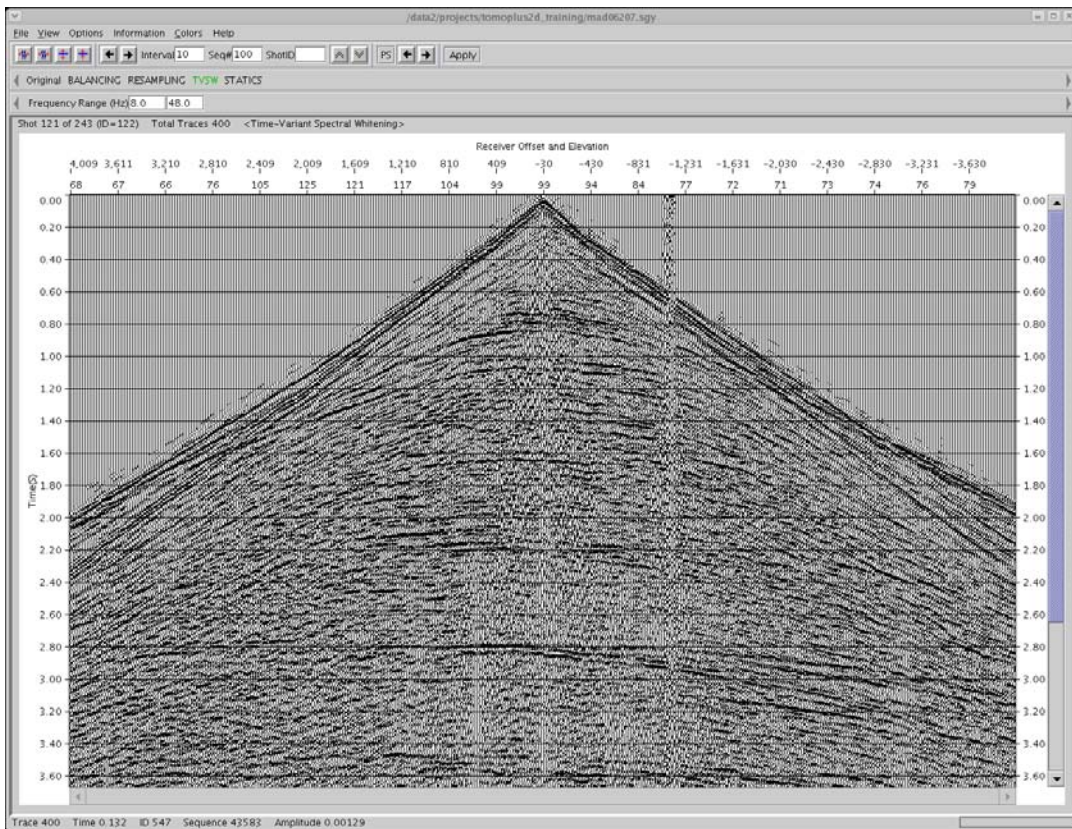
This project is going to process a 2D dataset from TPAO. The data quality is good, however, subsurface velocity model building is difficult, and prestack depth migration is very sensitive to the model. An initial model has been estimated with velocity scanning approach. This project is going to refine the depth model with full-waveform tomography and resolves both the near-surface and subsurface velocity structures in one effort.

This project includes: 1) extract source wavelet; 2) process seismic data; 3) perform waveform tomography.

Data Offered:

mad06207.sgy (SEG Y data)

velmod.mdl (initial subsurface velocity model)



MIT OpenCourseWare
<http://ocw.mit.edu>

12.571 Near-Surface Geophysical Imaging
Fall 2009

For information about citing these materials or our Terms of Use, visit: <http://ocw.mit.edu/terms>.