

Cross-well reflection imaging by seismic interferometry

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The term seismic interferometry refers to the principle of generating new seismic responses by crosscorrelating seismic observations at different receivers.

We apply this technique to the cross-well reflection survey.

We synthesize pseudo cross-well seismic records by applying the seismic interferometry to records observed in wells using the sources on the earth's surface. We apply migration technique to reflection waves in the synthesized data and image subsurface structures.

We obtained good results quite similar to the result of a conventional cross-well reflection imaging.