Application of new imaging method on 2D seismic land data

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Summary
In the last few years new imaging methods have been introduced. One of the most important and powerful procedure for seismic time imaging is Common Reflection Surface stack (CRS stack) method. In contrast to the conventional methods like NMO/DMO stack and pre-stack time migration which are based on velocity information, the CRS stack method is independent of a velocity model. In this study we perform a stacked section without any velocity analysis using CRS move out formula. In this study we use this method for 2D land data by inhomogeneous layers. We determine and apply CRS stacking operators for 2D media. CRS stack operator is more general than NMO/DMO stack and pre-stack time migration operators. The CRS stack is a macro-velocity independent method. In this way we obtained three useful attributes. Using these attributes it is possible to derive macro-velocity model. The continuity of events enhanced and signal-to-noise ratio is improved significantly.

keywords:
seismic imaging, attribute, stacking