The Role of Statics Application in The Imaging of Sub-Surface in Fold Belt Areas.

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Static corrections to seismic data compensate for velocity and thickness variations within the weathered zone. An uncompensated weathered layer thickness can distort the spectrum of the signal and result in aberrations on final stacked data. Static corrections because of weathered and sub-weathered zones is the most fundamental unsolved problem in reflection seismic survey from the standpoint of practical operating techniques. Shallow seismic reflection surveys with special processing efforts can be of great help to build a Near Surface Model. Deep upholes may assist in calibration of velocities and thickness of layers in near surface .Static corrections computed from this Near Surface Model and applied to conventional/deep reflection survey data may improve the seismic stack quality. This method though in its early stage of development will go a long way in easing imaging problem in fold belt areas to some extent.