A New Seismic Attribute Aids to Map the Embedded Geological Features From Low Bandwidth Seismic Data

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The seismic resolution (or bandwidth) plays an important role for better visualization or quantification of interesting geological features in interpretation, which helps in reducing the exploration risk. It is difficult to extract the embedded geological information in the seismic data having a low seismic bandwidth. An object oriented seismic attribute generation and analysis provides a better result in such type of seismic data (low bandwidth). In the present paper a new seismic attribute volume has been generated using a mathematical relation ,which provides an improved mapping of morphological(e,g pinch outs, faults, channels etc.) and reflectivity(e,g Lithology, reservoir thickness etc) components of seismic data with geological objects and also explain the observed results at a set of wells.