Interpretation and structural visualization in a complex thrust terrain of the Alberta Foothills

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Collaborative work environments or Visualization centers provide multi-disciplinary teams of Geoscientists, Engineers and other professionals with the tools and technology to study complex three dimensional subsurface data to facilitate the decision making process.

This study presents a practical application of visualization, interpretative techniques and mapping of a three and two-dimensional (3D-2D) seismic volume of Prestack migrated time (pstm) data using such a facility. The study area is located in a complex thrust terrain of the Canadian Cordillera along the eastern margin of the Alberta Foothills in the Blackstone/Cordel area.

The primary prospect is gas in the fracture enhanced, porous carbonate reservoir of the thrusted Mississippian Turner Valley Formation. This interpreted seismic data set defines the variation along strike and structural geometry of the individual thrust sheets, which is a key element in the location and steering of horizontal wells.



Combine various data types and domains in 3 dimensions



3D Seismic Volume