

Post- and Pre-Stack Attribute Analysis and Inversion of Teapot Dom 3D Seismic Dataset

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Summary

Creating a clear image to the seismic dataset is the most considerable goal on the seismic method. After processing 3D seismic data by using ProMax and Geotomo softwares and giving a clear image, the data is ready to the inversion; therefore, using several types of inversion methods and compared them together, is the one of the easiest ways of knowing which image is the best for the 3D seismic data. The methods are post-stack inversion, the elastic impedance, and the pre-stack inversion and AVO attributes. Clearly knowing the best image of the reservoirs is by visualizing and interpreting the results. The above approaches are illustrated on a real 3D dataset from the Teapot Dome oilfield in Wyoming, U.S.A.