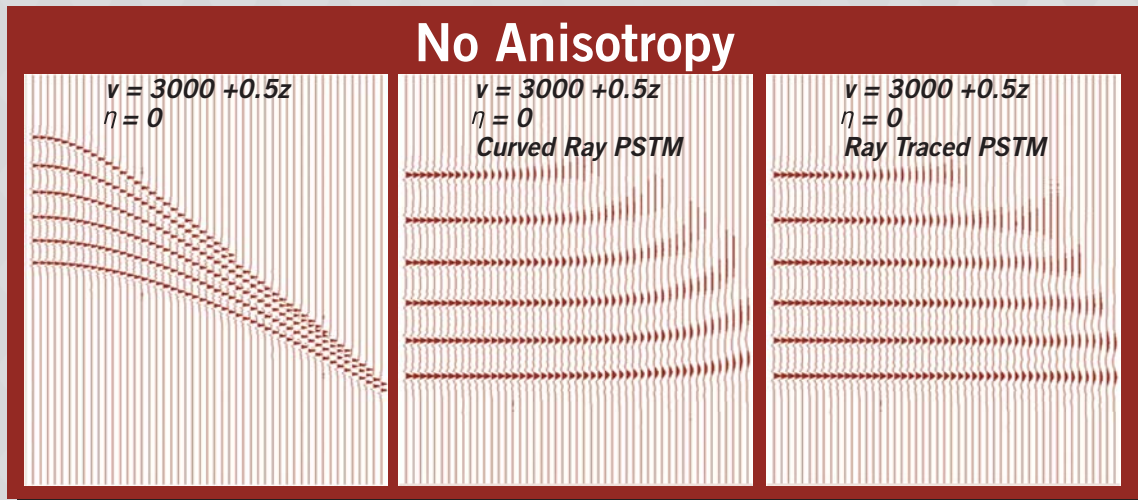


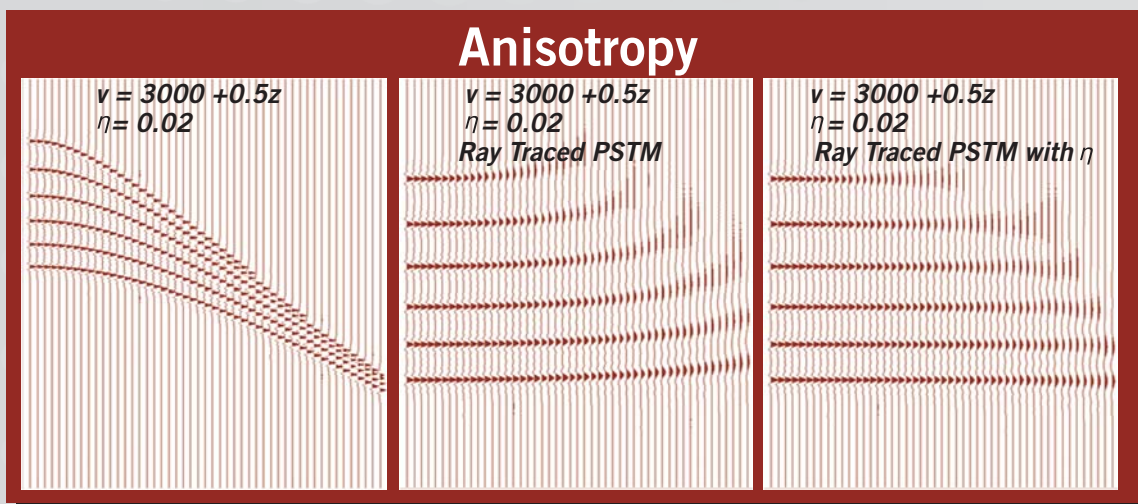
Ray Traced Anisotropic PSTM

Accuracy to all orders in traveltimes!

- Go beyond 4th or 6th order traveltimes computation used by other time migrations
- Account for VTI with the Anisotropic 1D Ray Tracer
- Incorporates all order of moveout as well as Anisotropy
- Pick Velocities and Eta (η) at the same time
- Improved and efficient Velocity and Anisotropy picking software
- No compromise on steep dips
- Turning Waves can be accurately imaged



The synthetic isotropic gather on the left has been prestack migrated using a 6th order curved ray algorithm in the center and a ray traced algorithm on the right.

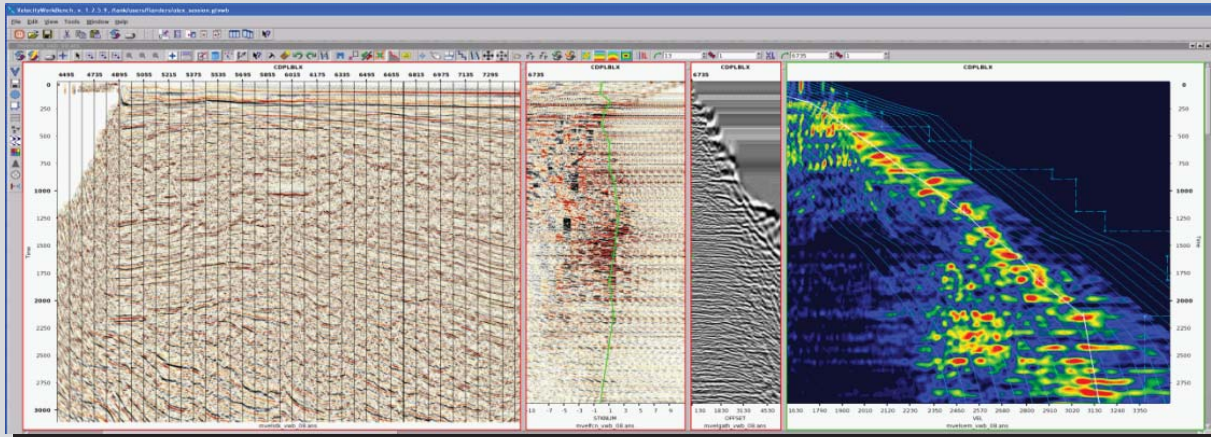


The synthetic anisotropic gather on the left has been prestack migrated using an isotropic ray traced algorithm in the center and an anisotropic ray traced algorithm on the right.



State of the art Velocity/Anisotropy picking complements the Ray Traced PSTM

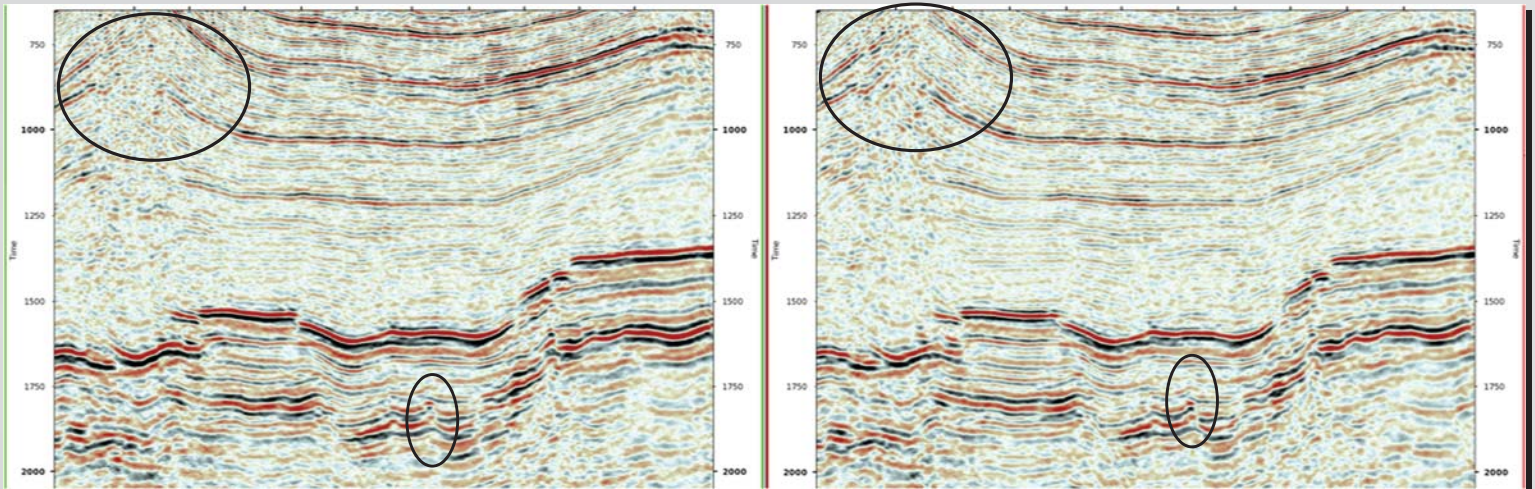
- Interactive tool design to pick Velocities and Anisotropy eta values
- Improve imaging on dipping events
- See deep subtle faulting critical in unconventional resource plays



Velocity Work Bench (VWB) is a state of the art Velocity and Anisotropic Parameter picker. The picks are then used by the Ray Traced PSTM to produce accurate imaging results.

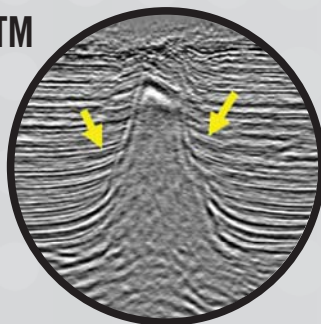
Curved Ray PSTM

Ray Trace Anisotropic PSTM

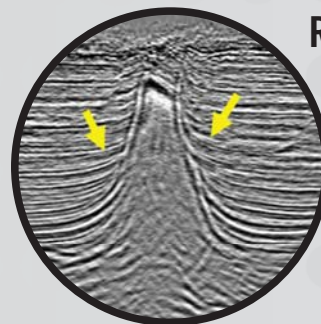


Anisotropic analysis and Ray Traced PSTM (right) have improved the more conventional 6th Order Curved Ray PSTM result on the left. The dipping events in the upper left of the section as well as the subtle faulting in the lower right have both been improved throughout the 3D volume.

Curved Ray PSTM



Ray Trace Anisotropic PSTM



The superior dip response is apparent in this migration done with a 6th order algorithm (left) and the new Ray Traced (infinite order) algorithm.

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