

# Simultaneous Pre-Stack Inversion

Simultaneous pre-stack inversion extracts elastic rock properties from seismic data. When calibrated to borehole data, these elastic properties enable quantitative seismic interpretation (QSI).

## Flexible seismic input:

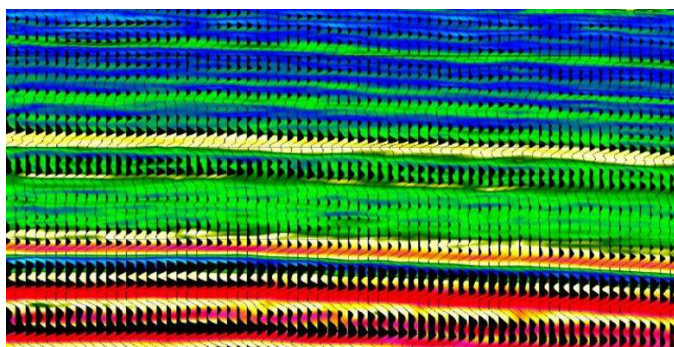
- Time- or depth-migrated
- Unstacked or partially stacked
- Minimum or zero phase
- Angle or offset domain

## Diverse selection of elastic attributes:

- Acoustic velocity or impedance
- Shear velocity or impedance
- Bulk density
- Poisson's ratio
- Vp/Vs
- $\Lambda \cdot \rho$
- $\mu \cdot \rho$
- Young's modulus

## Applications for reservoir characterization:

- Elastic volumes for stochastic refinement
- Reservoir delineation
- Brittleness prediction
- Fluid prediction
- Porosity prediction
- Lithology classification
- Net-to-gross ratio prediction
- Identification of flow barriers



PreSDM section with absolute P-impedance in color

