

Article N°5:

Interpretation: Seismic imaging in and around salt bodies

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Seismic imaging of evaporite bodies is notoriously difficult due to the complex shapes of steeply dipping flanks, adjacent overburden strata, and the usually strong acoustic impedance and velocity contrasts at the sediment-evaporite interface. We consider the geology of salt bodies and the problems and pitfalls associated with their imaging such as complex raypaths, seismic velocity anisotropy, P- and S-wave mode conversions, and reflected refractions. We also review recent developments in seismic acquisition and processing, which have led to significant improvements in image quality and in particular, reverse time migration. We tried to call attention to the form, nature, and consequences of these issues for meaningful interpretation of the resulting images.

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