

Geometry Controlled PSDM Tomography

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ABSTRACT

In structurally complex areas the generation of good quality seismic images necessarily requires the integration of the interpretation, processing and imaging disciplines. Seismic imaging includes the step of velocity model update through migration velocity analysis (MVA). Usually the velocity model is refined at the end of each cycle of MVA based in interpretation, but one cycle of MVA includes many tomography internal iterations without structural constrain with the risk of losing geological sense. This work proposes to include in the MVA a new step to velocity constrain using frameworks over the velocity updated by the tomography. We developed a SeisSpace module to create compartments associated to the geometry of the structural model to use in each tomography velocity update.