ONE DIMENSIONAL STOCHASTIC INVERSION (ODiSI) – A NEW APPROACH FOR RESERVOIR CHARACTERISATION USING SEISMIC TRACES

A.Gasimov

Azerbaijan, BP

Inverting seismic traces to derive geological parameters is a key goal for the geophysicist with many techniques available. We present one of the methods developed in BP called One Dimensional Stochastic Inversion (ODiSI). Unlike many other inversion methods ODiSI does not require a Low Frequency Model (LFM) cube input which tends to bias the final response and can lead to incorrect results. Instead ODiSI uses trends derived from well logs to create a large number of pseudo-wells for every seismic trace location which are then compared to coloured inverted angle stacks to derive the best match to the real seismic. Critically, associated uncertainties are also output. We present the methodology and its usage within the ACG field.