

LARGEO provides design of a seismic acquisition program, including survey feasibility study, acquisition and modeling studies using a variety of techniques depending on survey type (sea, land, TZ), surface and subsurface conditions and data acquisition technology (including wide-azimuth, multicomponent and time-lapse surveys).

The primary goal of the survey design is to specify and assess a set of key acquisition parameters that could be implemented in the field, which have to support the successful implementation of modern processing and imaging techniques. It is also important to look for a solution that integrate operational realities and constraints with specific processing requirements.

As a primary tool for ray tracing and illumination studies we use NORSAR-2D/3D ray trace modelling software.

LARGEO applies full-wave modeling and ray tracing at all stages of seismic surveys. This approach allows assessment of kinematic and dynamic features of different wave types, selecting best registration parameters. Preliminary seismic modeling will help to carry out illumination studies of target zones and to analyze imaging results of synthetic data. During seismic modeling we utilize all available geological and geophysical information, including near-surface information, subsurface geological conditions, previous processing and interpretation results etc.

The Seismic modeling department is working in cooperation with seismic data processors from Data processing department and geophysicists and geologists from Interpretation Department. The collaboration between departments enables us to deliver solutions that help our clients to maximize the value of seismic data, minimize drilling risks and optimize investments.



MODELING OF SEISMIC SURVEYS AS A TOOL FOR EVALUATING EFFICIENCY AND IMPROVING RELIABILITY OF SEISMIC PROJECTS" presented at EAGE First Workshop on the caspian region in Atyrau, 2011