

Planning a Seismic Survey Offshore Myanmar Using Finite Difference Modeling and a Conceptual Earth Model

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ABSTRACT

Planning new seismic in a frontier area can be sometime challenging, due to lack of geophysical information. To design a new survey, it is of paramount importance to collect vintage seismic, in order to evaluate the local terrain response and to build a reliable velocity-depth model. This reference model is used to assess the main future acquisition parameters, taking advantage from forward modeling and successive imaging of the results. At the end of 2015, a feasibility study was requested by Eni Myanmar, for a seismic 2D acquisition on the MD-02 Block offshore Myanmar. The new block is located in the Rakhine Basin, Bay of Bengal. It was concluded that an effort to acquire broad-band data or to make effective broadband processing technology was of paramount importance in this difficult environment, by towing cable in a deep and more silent environment. The seismic source should contribute too in generating the deserved low frequencies. Once all the main parameters were evaluated, a table was prepared and passed to the acquisition department. The acquisition took place last year, honouring the recommended parametrization and confirmed the seismic quality prediction performed during this study.