
Large-Scale Seismic Acquisition in Congested, Shallow Water Areas: Observations from Modern OBN Data in the Gulf of Mexico

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ABSTRACT

Academic and research use of ocean bottom node (OBN) seismic technology has been around for several decades. Commercial applications, however, have only been used since 2004. The first OBN acquisition projects were in the deepwater Gulf of Mexico where dense infrastructure made streamer acquisition impractical. As an alternative the industry quickly adopted OBN acquisition to provide the long offset, full azimuth, high quality, and repeatable data necessary for production seismic and 4D analysis. Recently the benefits of deepwater OBN technology has been extended to shallow water where high speed deployment methods, very large channel counts and blended source technology have enabled the acquisition of cost effective, large scale multi-client surveys suitable for production and exploration in a mature, highly obstructed area like the Gulf of Mexico shelf.

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