

Making the decision to invest in ocean bottom seismic

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The advantages of OBS technology are well known. The combination of hydrophone and geophone recordings allow suppression of the receiver ghost, giving broadband data. Improved illumination is achieved with wide azimuth and long offsets, and signal to noise is enhanced by high fold and dense sampling. Furthermore, shear wave recordings can be used to image through gas where P-wave data gets distorted.

Historically, efficiency and cost have prevented multi-component surveys from entering the mainstream. OBS surveys were typically utilized to solve big problems on big fields, such as imaging through gas clouds.

However, recent improvements in receiver deployment efficiency and utilization of multiple source arrays have driven the costs down, to the point that large scale OBS surveys for exploration are now feasible.

This presentation will demonstrate the value of OBS through several examples from AkerBP's seismic library, and will consider the factors in the seismic decision process that lead to acquisition of OBS.