

What are the Benefits of Digital Geophones - and How Long is a Piece of String?

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Abstract

Recent years have seen a large increase in different technologies employed in land acquisition around the world, both for sensors and for recording instruments, all making claims for how they can uniquely solve some of our most difficult exploration problems. A number of these technologies have now had sufficient use and important feedback has been made available so that comparisons can be made and recommendations offered.

Using not only recent real-life results but also by going back to basics for the best scientific understanding, this paper broadly considers different instruments types and takes an up-to-date look at the use of conventional strings of geophones, and at digital geophones for both 3C and single component acquisition. It then considers what may be the best combinations of technology which could be beneficially applied to increasing the efficiency of land operations under varying conditions and for putting it on a better business footing.

Finally, using this newest data this paper looks to the near term future to suggest where the industry is heading, and where it may need to change course.