New Frontiers in Seismic Exploration

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One of the most important new advances in geophysical investigation is the successful application of 3-dimensional marine data acquisition and processing. This has taken place in relation to, and in parallel with, the development of areal energy sources, and represents a new frontier in marine seismic exploration.

For both economical and technical reasons, the present trend is towards more accurate and more detailed mapping of the complex structures beneath the sea-bed.

3D and the application of directive areal arrays are tools developed in order to meet these industry demands.

The paper will review all stages of a 3D survey by discussing:

- the planning stage with considerations of source and receiver

- the processing of 3D data with case examples

- interpretation of 3D data.
