

RECENT TREND IN DATA ACQUISITION TECHNOLOGY

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ABSTRACT

Data acquisition technology has gone through a transition from general reconnaissance of large surface areas to detailed mapping of identified subsurface structures. The technological requirements to support this transition have provided advances in source/receiver configurations, hardware and software systems for land and marine, and data acquisition methods. This paper presents trends, developments and applications of segments of these technologies in the land and marine environment. Special emphasis will be devoted to tuned source receiver arrays for marine, marine streamer attitude sensing and land source development. The trend toward increased accuracy in navigation will be discussed as it is related to the trend toward increased spacial sampling. Methods for achieving increased spacial sampling will be discussed for both the land and marine environment. The paper will conclude with a short discussion on future trends in data collection technology. Actual and model data will be presented where applicable.

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