

论文

高分辨率数据处理技术在近海工程地震勘探中的应用

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摘要 在近海工程多道浅地层地震勘探中, 高分辨率地震数据处理技术是一个重要的组成部分, 也是提高资料分辨率和信噪比的有效途径. 由于为工程服务的近海地震勘探对分辨率的要求很高, 因此地层速度的拾取和衰减多次反射干扰波成为影响分辨率的主要因素. 本文针对我国某海域工程地震资料, 运用了高分辨率速度分析技术和K—L变换多次波压制方法, 极大地提高了资料的信噪比和分辨率, 有效地解决了该地区的工程地质问题.

关键词 [高分辨率](#) [数据处理](#) [速度分析](#) [多次波压制](#)

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**The application of high resolution seismic data processing technique in multi-channel shallow offshore engineering seismic surveys**

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**Abstract** The high resolution data processing technique is an important aspect for the multi-channel shallow seismic exploration of offshore engineering geophysical surveys, and also, it is an effective way to improve the resolution and signal-to-noise rate ( S/N ) of data. Due to the rigorous demand of high resolution of offshore Engineering Geophysics, the velocity picking and the multiple attenuating have become two important influences. In this paper, two methods were presented to improve the resolution and S/N rate of offshore engineering seismic data, which are high resolution velocity analysis and KL-transform multiple removal techniques. Coupled with the drilling information, the result showed the excellent accuracy, and solved the engineering geology problems efficiently.

**Key words**

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