

高密度地震技术

SN地区高密度地震数据叠前噪声分析及其压制

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摘要 针对我国西部SN地区岩性勘探的需要,开展了高密度单点地震采集。高密度采集中特有的单点接收方式,加上该区表层条件复杂多变,导致地震记录中干扰波发育,信噪比低。根据SN地区高密度地震资料的特点,运用多种手段对记录中的各类噪声进行了分析,采取相应的措施进行了压制,总结出一套适合该区特点的噪声分析方法和行之有效的叠前去噪配套技术,在实际数据处理中取得了良好的应用效果。

关键词 [噪声](#) [干扰波](#) [信噪比](#) [叠前去噪](#)

Prestack noise analysis and attenuation for high density seismic data from SN area

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Abstract Acquisition of high density spatial sampling is conducted to meet the need of lithology exploration in SN area of west China. Seismic data acquired with high density sampling are contaminated by various noises, and are of very poor S/N ratio because of complicated surface conditions and single point receiving system used. According to the characters of high density seismic data from SN area, many methods were utilized to analyze noises in raw data, and a set of measures were adopt to reduce noises before stack.Applications in field data show that the noise analysis and attenuation is especially effective in the target area.

Key words [noise;interference;signal to noise ratio;prestack noise attenuation](#)

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