

中国南方油气勘探

基于地表直接偏移技术的山区复杂构造成像

方伍宝, 朱海波, 潘宏勋, 徐颖

中国石油化工股份有限公司石油勘探开发研究院南京石油物探研究所, 江苏南京210014

收稿日期 2008-3-21 修回日期 2008-7-17 网络版发布日期 2008-11-13 接受日期

摘要 针对山区复杂构造成像质量低的问题, 在我国南方山区进行了起伏地表直接叠前偏移方法试验。试验区构造上属于川东断褶带, 地表切割剧烈, 接收条件较差; 深层三叠系下统嘉陵江组地层褶皱严重, 反射系数极不稳定, 反射同相轴连续性较差, 地震成像难度大。在精细叠前道集处理的基础上, 利用自主开发的起伏地表直接叠前时间偏移技术, 对试验区约70km²的三维地震资料进行了偏移处理, 使得负向构造区偏移成像的质量较常规偏移成像结果有一定的提高。

关键词 [直接偏移技术](#); [复杂地表](#); [负向构造](#); [成像技术应用](#)

Application of seismic migration direct from ground surface in imaging complex structure in mountainous area

Fang Wubao, Zhu Haibo, Pan Hongxun, Xu Ying

Institute of Geophysical Prospecting, SINOPEC Exploration and Production Research Institute, Nanjing 210014, China

Abstract In order to improve imaging quality of the complex structures in the mountainous areas in southern China, seismic migration direct from ground surface was adopted. Because of the complex surface in eastern Sichuan folded zones, noises are very heavy in seismic records. Furthermore, the deep Triassic layers of Jialingjiang Formation are seriously folded. Therefore reflection coefficients vary fast in transverse direction, and reflection events are discontinuous. Based on careful preprocessed prestack seismic gathers, seismic migration direct from ground surface was performed on a 70km² 3 D seismic dataset from the eastern Sichuan. The imaging precision of synclinal structures is higher than that of previous results.

Key words [seismic migration direct from ground surface](#); [complex surface](#); [synclinal structure](#); [application of imaging technique](#)

分类号 [P631.4](#)

DOI:

通讯作者:

作者个人主页: 方伍宝; 朱海波; 潘宏勋; 徐颖

扩展功能

本文信息

▶ [Supporting info](#)▶ [PDF\(4464KB\)](#)▶ [\[HTML全文\]\(0KB\)](#)▶ [参考文献\[PDF\]](#)▶ [参考文献](#)

服务与反馈

▶ [把本文推荐给朋友](#)▶ [加入我的书架](#)▶ [加入引用管理器](#)▶ [引用本文](#)▶ [Email Alert](#)▶ [文章反馈](#)▶ [浏览反馈信息](#)

相关信息

▶ [本刊中 包含“直接偏移技术; 复杂地表; 负向构造; 成像技术应用”的相关文章](#)

▶ 本文作者相关文章

· [方伍宝](#)· [朱海波](#)· [潘宏勋](#)· [徐颖](#)