地球物理学进展 2007 22 (6): 1856～1861 ISSN: 11-2982/P CN: 1004-2903

平衡剖面技术在国内外油气勘探中的最新应用

张进铎

（东方地球物理公司研究院，涿州 072751）

收稿日期 2007-3-10 修回日期 2007-6-20 网络版发布日期 2007-12-20 接受日期

摘要 平衡剖面技术是油气勘探中的一项辅助解释技术，它提供正演与反演两种模拟过程.正演模拟过程可以迅速、有效地检验某种地质假设，为解释人员提供合理的解释模型，同时，正演过程可以动态显示构造变形历史，为研究油气藏的形成、演化提供依据；而反演模拟过程则可以迅速地对剖面解释结果进行合理性检验，避免解释中的随意性，提高剖面解释的质量和效率.本文对平衡剖面有关的概念、原理、应用条件及变形机制等进行了系统归纳与总结，并详细介绍了国内外平衡剖面技术在油气勘探中的最新应用实例.

关键词 平衡剖面,变形机制,正演过程,反演过程,断层相关褶皱,构造样式

分类号 P631

DOI:

The most new applications of balanced cross-sections technique in oil and gas exploration in China and overseas

Zhang Jin-duo

(Institute of East Geophysical Company, Zhuozhou 072751, China)

Received 2007-3-10 Revised 2007-6-20 Online 2007-12-20 Accepted

Abstract The technique of balanced cross-sections is an aid for seismic interpretation, which can be used in oil and gas exploration. There are forward modeling process and inverse modeling process in it, the forward modeling process can be used to test some geological hypotheses rapidly, being used to provide reasonable models for geologists and geophysicists, being used to show the history of tectonic deformation, to provide the proof of generation and development for reservoirs. At the same time, the inverse modeling process can be used to test the validity of interpreted sections fast, to avoid the arbitrariness and to increase the quality and efficiency in seismic data interpretation. This paper sums up the concept principle of the balanced cross\|section, and introduces its the most new application in oil and gas exploration in China and overseas.

Key words P631

通讯作者:
张进铎 peter_zhang@163.com
作者个人主页: 张进铎