从跨断层短基线观测计算地应变的方法探讨——以唐山台地形变数据为例

黄建平[1, 2],石耀霖[1],李文静[3]*

1 中国科学院研究生院计算地球动力学重点实验室，北京 100049
2 中国地震局地震预测研究所，北京 100036
3 中国地震局第一监测中心唐山台，唐山 063001

Method of strain calculation based on the cross-fault short-bas taking the Tangshan deformation data as an example

HUANG Jian-Beng[1, 2], SHI Yao-Lin[1], LI Wen-Jing[3]*

1 Lab of Computational Geodynamics, Graduate University of Chinese Academy of Sciences， Beijing 10(
2 Institute of Earthquake Science, China Earthquake Administration， Beijing 100036，China
3 Tangshan Deformation Station of the First Crust Monitoring Center, China Earthquake Administration， 1

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摘要

跨断层测量是研究断层活动特征的重要手段之一.本文介绍了一种利用台站短基线观测，通过刚体模型、弹性体模型和组合，层或断裂带附近应变的方法，并以唐山地形变台资料为例进行对比分析.通过对比同时间段的位移和应变时间序列的变化幅，征，认为组合模型更符合实际情况.同时，分析了多条测段不同组合情况下的模型计算结果，探讨了跨断层观测资料与区域(算结果之间差异的原因.并提出了基线过渡桩更可能位于断层东侧的认识.

关键词： 断层模型   弹性模型   唐山台   地形变

Abstract：

Cross-fault observation is one of the important methods in fault movement study. Here a method calculation using a fault model, elastic model, and combination model is introduced based on the cross-fa baseline observation, and the crustal deformation data from Tangshan station is taken as an exa comparison of the amplitudes and trends of the displacement and strain within the same period, the cc model is taken as the best. Meanwhile, different kinds of segment combinations are used for those mode reason of the difference between cross-fault observation and GPS is also discussed. And it may be n that the connection bench should be on the east side of the fault.

Keywords：   Fault model   Elastic model   Tangshan station   Crustal deformation

Corresponding Authors: 黄建平   Email: huangjianping@seis.ac.cn

About author: 黄建平，男，助理研究员，中国科学院在职博士研究生，主要从事统计地震学和地震动力学模型研究.