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CALCULATION OF IMMEDIATE PREDICTION PROBABILITY FOR LARGE EARTHQUAKE IN CHINA

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Abstract

Using the immediate burst precursor of large shocks and the distributive character of their time interval, we have studied the variation with time of the probability of immediate earthquake occurrence. The results show that the predicative level of single precursor is very low, but for multiprecursor, the comprehensive probability is able to describe the change before earthquake and a better prediction can made using it. The conclusions were verified taking the Tangshan earthquake as example.

Key Words: Impending Earthquake Prediction; Large Earthquake; Probability of Prediction

托来 6.0 级地震的预报

1993 年 10 月 26 日在甘青交界的托莱牧场发生了 6.0 级地震,震中位置为北纬 38.6°、东经 98.7°。该地震距嘉峪关断层气观测点 120km。兰州地震研究所水化室气体组对这次地震作出过短期预报。

在 1993 年 6 月的年中会商及 7 月 30 日的月会商中,该研究组根据嘉峪关断层气氡出现的一年以上的高频次多阶段异常变化和断层气氢、氦、氖异常,两次提出:"近期在嘉峪关断裂及其附近有发生 5.5 级左右地震的可能。若地震发生在 8 月份以后,震级将在 6 级左右"的预报意见。

地震发生后,该研究组又核实和分析了上述异常。目前正密切注视资料的发展变化趋势。

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