

## 沪宁铁路翻浆冒泥病害的地质雷达检测

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**摘要** 根据沪宁线地质雷达检测翻浆冒泥病害的实践,研究了地质雷达检测结果的分析方法,给出路基结构分层及其雷达图像特征。根据翻浆冒泥病害特征提出翻冒通道的概念,揭示了翻浆冒泥病害沿路基深度方向和线路纵向的分布特征,提出根据一段线路翻冒通道的发育和分布型式确定其翻浆冒泥病害分类的方法。应用该方法给出了沪宁线18段共4 000多米长的翻浆冒泥和下沉外挤病害线路的地质雷达检测结果,为病害路段的整治设计提供了依据。

**关键词** [铁路,沪宁线,地质雷达,路基检测](#)

分类号

## GPR INSPECTION FOR SHANGHAI—NANJING RAILWAY TRACKBED

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### Abstract

A new method is developed for interpreting GPR data to describe trackbed substructure layers and evaluate mud pumping along railway. This new method uses GPR image patterns to identify the substructure layers and types of mud pumping, and includes a new inspection concept called as mud pumping passage. Specifications of this new inspection method are outlined in this paper and its application is described for evaluating the railway from Shanghai to Nanjing. Details of the mud pumping results are given along with available repair recommendations.

**Key words** [railway, Shanghai-Nanjing railway, GPR, trackbed inspection](#)

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