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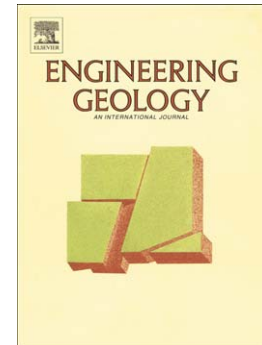
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Distributed Acquisition, Characterization and Process Analysis of Multi-field

Information in Slope

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1. Introduction

Landslides are one of the most problematic and diffuse natural disasters in the world, threatening human life and influencing the socio-economic conditions of many countries. Monitoring and forecasting of landslide have acquired great importance for the scientific community since the 1940s (Zhu et al. 2011b). Using adequate monitoring system is a powerful tool to understand and interpret the kinematic aspects of landslide movement, and it is an indispensable aid in identifying and checking alarm conditions (Angeli et al. 2000).

Conventional landslide monitoring technologies based on electromagnetic sensors have many drawbacks such as point sensing, poor anti-interference, poor stability and poor durability etc., which limit the effectiveness of modern slope engineering monitoring and landslide warning. A variety of monitoring methods and sensors have been introduced into the landslide monitoring fields, such as GPS, SAR and InSAR, based on advanced space observation technology, that are used for the slope deformation detecting (Cascini et al. 2010; Crosetto et al. 2005; Fruneau et al. 1996; Gili et al. 2000; Zhu et al. 2013). Although they are quite suitable for slope movement

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