

Accepted Manuscript

System Reliability Analysis of Slope Stability Using Generalized Subset Simulation

Dian-Qing Li , Zhi-Yong Yang , Zi-Jun Cao , Siu-Kui Au ,
Kok-Kwang Phoon

PII: S0307-904X(17)30053-7
DOI: [10.1016/j.apm.2017.01.047](https://doi.org/10.1016/j.apm.2017.01.047)
Reference: APM 11545

To appear in: *Applied Mathematical Modelling*

Received date: 21 March 2016
Revised date: 14 November 2016
Accepted date: 13 January 2017

Please cite this article as: Dian-Qing Li , Zhi-Yong Yang , Zi-Jun Cao , Siu-Kui Au , Kok-Kwang Phoon , System Reliability Analysis of Slope Stability Using Generalized Subset Simulation , *Applied Mathematical Modelling* (2017), doi: [10.1016/j.apm.2017.01.047](https://doi.org/10.1016/j.apm.2017.01.047)



This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- Generalized Subset Simulation (GSS) is used to evaluate slope system reliability;
- Failure probabilities of multiple failure events are obtained by a single GSS run;
- Representative and key failure events are determined in a rational manner;
- Computational efficiency of slope reliability analysis is significantly improved;
- Contributions of key failure events to slope failure are quantitatively evaluated;

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/5471056>

Download Persian Version:

<https://daneshyari.com/article/5471056>

[Daneshyari.com](https://daneshyari.com)