Accepted Manuscript

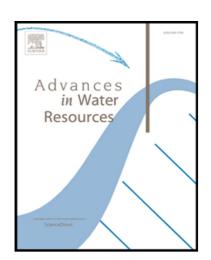
A numerical manifold method model for analyzing fully coupled hydro-mechanical processes in porous rock masses with discrete fractures

Mengsu Hu, Jonny Rutqvist, Yuan Wang

 PII:
 S0309-1708(16)30649-2

 DOI:
 10.1016/j.advwatres.2017.02.007

 Reference:
 ADWR 2779



To appear in: Advances in Water Resources

Received date:13 November 2016Revised date:3 February 2017Accepted date:7 February 2017

Please cite this article as: Mengsu Hu, Jonny Rutqvist, Yuan Wang, A numerical manifold method model for analyzing fully coupled hydro-mechanical processes in porous rock masses with discrete fractures, *Advances in Water Resources* (2017), doi: 10.1016/j.advwatres.2017.02.007

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

- Fully coupled hydro-mechanical analysis of porous rock masses with discrete fractures
- Mechanical model for fractures considering their open, closed and sliding states
- Fluid flow model considering along-fracture and normal-to-fracture flow without introducing additional DOFs
- Indirect coupling with dynamic changing fracture conductivity and mechanical constitutive behavior
- Implementation in NMM with non-conforming mesh
- Verified accuracy, efficiency and applicability

Download English Version:

https://daneshyari.com/en/article/5763668

Download Persian Version:

https://daneshyari.com/article/5763668

Daneshyari.com