白山山系の背梁を形づくる巨大屋根の超大規模スペリ・崩壊の3次元岩・水連成安定解析

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3-D stability analysis of colossal collapse of Mt.Hakusan

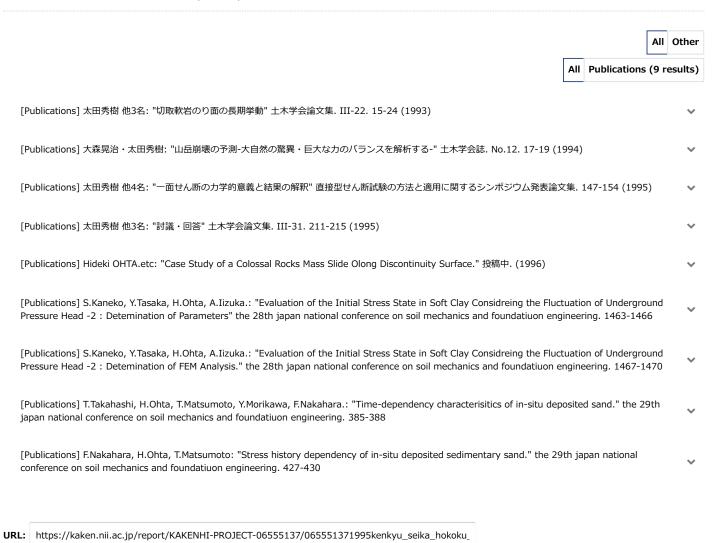
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Research Abstract
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The bodies of mountains are made of rocks which contain a number of cracks with thin layrs of clay. Many of the mountain collapse are triggered by the increase in the water pressure acting on such planes of separation in the rock mass. In order to analyze the mountain collapse, it is needed a computer program which deals with a three dimensional configuration of the rock mass containing a number of plane of separation. In this research project, we have developed a computer program designed for this purpose and apply the program to analyze the colssal collapse of Mt.Hakusan (The White Mountain, 2703m). For a purpose of calibration, many cases of mountain collapse mainly experienced in Noto area where rock materials are

extremely weak are analyzed by the developed program. The results of these trial analyzes are basically satisfactory. One of the input data needed in the analysys is the stength of the thin clay material resting in the gap of the planes of separation. We have successfully taken undisturbed samples of thin clay and tested then in a shear box under conditions of constant volume. How to take the samples and how to test them are also the useful harvest of this research project.

Research Products (9 results)



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