

The effect of entrapped air on runoff and landslide initiation

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<http://www.sakura.cc.tsukuba.ac.jp/~emco6022/onda.htm>

To examine the effects of the supercharge pore air on runoff generation and landslide initiation, a large-size sprinkling experiment was conducted.

The experimental slope with 6.25m long, 1.5m wide and 30 degrees has open space, simulating fractured rock, of 5m long, 1m wide and 10cm high. The results of the experiments indicates that a quick response of the groundwater discharge to the rainfall is considered to be caused by the break of an equilibrium of force that the supercharge air mass touch on including water beforehand in the capillary fringe. Also the air pressure is larger than 0.4MPa, landslide at the bottom of the slope was occurred.