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# 3D-effects on structural controls on hillslope processes

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It is well known that the joint structure controls the failure mechanisms and thus the stability of rock slopes. However, in most cases stability is assessed only in 2D cross sections taking into account plane strain conditions. The rock wedge sliding on two joint planes mostly is the only exception of this rule. Regarding the rock slope failure mechanisms “toppling” and “rock slumping” the paper shows the influence of the strike of structural planes on slope stability if structural planes do not strike parallel to the strike of the slope. The influence of the deviation of the strike of the joint planes from the strike of the slope has been investigated by means of the Distinct Element Code 3DEC.