

Editor Comments (in black), our response (in blue) and revised manuscript passages (in dark orange)

Abstract and introduction:

Is it possible to somehow clarify the difference between what is meant by precondition vs. prepare? It seems that precondition refers to the geologic structure that leads to water and associated pore pressure accumulation. That then leaves a reader wondering what is meant by prepare and whether that is redundant?

We understand this issue. Preconditioning factors influence hillslope stability but are unchanging over time as geology. In contrast, preparing factors change the stability over time for example a river undercutting a slope or deforestation and change hillslope stability from stable to unstable but without triggering the failure. Due to the word limit, we could not adapt the abstract without large changes. Therefore, we added a sentence to the introduction to clarify the difference between preconditioning and preparing factors.

“Preconditioning factors influence hillslope stability and are temporarily unchanging, while preparing factors reduce hillslope stability over time to an actively unstable state.”

Please change low-permeable to low permeability. Please ensure that references to permeability or hydraulic conductivity are consistent throughout the manuscript.

Done.

Fig1a: Please clarify in the caption why the geologic profile has the 2D shape that it does. Is it meant to be 2D or simply distorted to represent a slope?

The profile is distorted to represent a slope. We changed the figure caption to: “(a) 2D slope profile with the major geological units in the Franconian Alb.”

L489: In dry locations?

Changed.

L509: Correct to “at depths too deep for tree roots”

Done.

L512: Is it possible to be more specific about what is meant by “low” or “high” saturation levels and distinguish between thickness of water saturation (i.e. height of water table) vs water saturation at a given depth?

We changed the text to clarify the differences between saturation as a result of increased height of the water table and high saturation or better high water pressure as a result of water enclosed between impermeable layers. Text changed to: “Scenarios incorporating original soil cohesion showed stable conditions independent of saturation while cohesion-less scenarios indicated unstable scenarios independent or starting at low height of water table. Mean soil cohesion scenarios revealed unstable conditions limited to high saturation levels during increased heights of water table. These saturation levels seem to be unlikely, however, unfavourable geologic conditions could result in high water pressures that develop between impermeable Feuerletten and clay layers within Rhätolias, reactivating deep-seated landslides.”