The Authors propose a closed-form analytical model for the mechanical behavior of stratified snow covers adopting the first-order shear deformation theory of laminated plates under cylindrical bending. The weak layer is modelled as an infinite set of smeared springs with normal and shear stiffness at the base of the plate. The problem is worth to be studied and it is of large interest for the scientific community. There are some points that must be clarified and further investigated.

- It is not clear the reminder to De Saint Venant's principle (l. 246) and how it can be applied in the model proposed by the authors as the localized stresses and effects are of primary importance for the release of the avalanche.
- The authors must clarify how the concentrated load applied on the surface of the slab enters into the solution of the first-order system of Eqn. (11).
- The authors must clarify how the size of the crack tip can be effectively measured in a real snowpack as it affects the results of the stability analysis.
- The authors confuse the energy release rate with the failure criterion. To let the crack propagate, it is necessary that the G term equals the critical G in the mixed mode. It is worth to mention that, in fracture mechanics, Mode 1 refers to an opening mode, differently from what the authors state in their approach. This point must be addressed in order to avoid misunderstandings.