

Interactive comment on “A statistical fracture model for Antarctic glaciers” by Veronika Emetc et al.

Anonymous Referee #1

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"The formation of fractures is a very complex process that cannot be effectively described by only applying damage mechanics."

"Previous analysis based on damage accounts for stresses, thickness and viscosity, but ignores such predictors as proximity to mountains and grounding line as well as the curvature of a channel, which might be crucial for modelling of the fracture formation in Antarctica."

This is not serious text - nothing breaks because it is close to mountains or a grounding line. Such parameters may be correlated to fracture only if they correlate indirect via ice mechanics. This is like correlating drowning accidents to ice cream eating. It is rather easy to construct such measures, but there is nothing to be learned from them. The connection are superficial.

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For this paper to be published a more relevant crevasse formation measure should be constructed. All included parameters should at least be thoroughly motivated.

Interactive comment on The Cryosphere Discuss., <https://doi.org/10.5194/tc-2017-98>, 2017.

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