

***Interactive comment on “Brief Communication:  
Measuring Rock Decelerations and Rotation  
Changes During Short Duration Ground Impacts”  
by Andrin Caviezel and Werner Gerber***

**Andrin Caviezel and Werner Gerber**

andrin.caviezel@slf.ch

Received and published: 13 September 2018

Dear referee, thank you very much for your positive review.

We ammended the manuscript according to your suggestions. The specific comments are adressed. 1) Abstract: we deleted the last part of the sentence. 2) p5. l.10.: the focus on distinct impact behaviour versus rollout behaviour is highlighted and the confusing comparisong of number of impacts deleted. 3) p.6. l8-9, l.15: We rephrased the sentence slightly, such that the deeper and longer scarring behaviour of rocks with higher kinetic energy should be more clear. The change of rotational speed is rather a function of slope inclination. This observation has been added to the existing explana-

C1

tions. p.2 line 19: Foremost, we want to show how future experiments might have to be designed in order to gather data for calibration of constitutive relationship for dynamic rockfall models. This is now also expressed in the manuscript. We agree, that more comparison with COR models is necessary to conclude in the earlier fashion. Thus we decided to remove the last paragraph for the time being and address comparisons in future work.

Best regards, Andrin Caviezel

Please also note the supplement to this comment:

<https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2018-89/nhess-2018-89-AC1-supplement.pdf>

---

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2018-89>, 2018.