

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

**Anonymous Referee #2**

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This paper is dedicated to the presentation of preliminary experimental results on rock rebound using an innovative system of sensors. The general presentation of the problem tackled and the interest of the research is well presented. In addition, the sensors system, its calibration, and the assessment of its accuracy are detailed in a satisfactory manner. In a second part, experimental results obtained for a limited number of rock rebound are analyzed. These results show that the methodology proposed is relevant: it will allow a better understanding of the processes occurring during the rebound of a rock. I therefore recommend publication of this research work as a brief communication.

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However, I have several minor comments / points that should be answered prior to publication. 1) Abstract : last sentence “and the basic ...mitigation”. I think that your results do not provide information on this point. It can be deleted. 2) p. 5 l. 10 : please could you better explain this point ? 3) p. 6 l. 8-9 and l. 15 : please could you clarify ? 4) conclusion – last paragraph : for sure, a more detailed and exhaustive analysis of a larger amount of results, mixed with numerical simulations, will show that it is almost not possible to obtain accurate modeling of rock propagation using restitution coefficients. But, in this paper, this is not demonstrated. I would advise to suppress this paragraph.

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

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