

## ***Interactive comment on “Brief communication: Accuracy of the fallen blocks volume-frequency law” by Valerio De Biagi***

**Anonymous Referee #2**

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The presented short communication deals with the error quantification of a previously proposed block volume frequency law by the same leading author (De Biagi et al., 2017). Above all the reliability of the law is explored with respect to missed events and the limited set of measured blocks.

Firstly, it is to say that the presented extension of the frequency law is an important extension. On the other hand, this short communication is for the broad readership difficult to understand as a stand-alone-publication. The readability and rigour of this contribution would highly benefit from a closer link to its predecessor publication especially to the presented data sets of Buisson and Becco dell’Aquila. As exercised out in RC1, bringing the content of the previously shown data into the here presented framework, both shows the applicability as well as helps in understanding the proposed

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formalism. Here is to note, that the absence of the aleatoric error in the review of the frequency law reliability is indeed a major concern as pointed out already in RC1.

Concluding, as for scientific completeness the variability of the Poisson parameter is of greater importance. For readability sake, the presented examples should be linked more clearly to the data set presented in the preceeding publication as exercised by a certain extent already in RC1. Additionally, the abstract should conclude in a more precise way showing the link to engineering practice.

Technical corrections:

p.3, l.8: “though Eqn. (5)” should read “through Eqn. (5)”

p.3, l.20: For clarity I would propose to write “The error  $\varepsilon_{T,p}$  ...”

p.4, l.1-2 & p.6, l.8 “in the sketch of the plot” should read as “... in the inset of Fig.1/3” or equivalently, due to the sketchy nature of the right hand side of the figure

p6., l.21: Delete the “anyway”, it supposes the preceding content is of minor importance.

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