**Interactive comment on** “The effects of cushion’s particle size and thickness on coefficient of restitution under the rockfall impacts” *by Chun Zhu et al.*

**Anonymous Referee #1**

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The paper has been significantly improved considering the suggestions from the reviewer and the questions have been properly answered. Therefore, it is suggested to accept the paper for publication falls the following minor points are corrected (minor revision): (1) There are still many typo errors which might due to that the authors directly copied the improved manuscript form Word to LaTeX. Most of the time the neighboring words are connected together, or a blank space between words is missing, or the font size is not right. The authors should check very carefully the following (but may not limited to) lines and make corrections: 38-41, 56-60, 68-72, 75, 81, 85-89, 95, 107, 120, 123, 138-141, 158-159, 168-173, 179, 197, 222, 226-232, 238, 252, 276-281, 290, 300-301, 309, 321-322, 334, 342-344, 351, 359, 362, 366-376, 390, 396, 402-405. (2) In line 158, it should be ‘spherical blocks with diameters of 4 cm, 6 cm, . . .’. (3) In Tables 1-3, the units for the parameters should not be italic or bold. (4) It is suggested the authors to check the Eqn. (6) and the related text contents whether the parameters and subscripts are correctly written. (5) At proper places one can shortly address why the authors use spherical instead of non-spherical blocks for tests. A short comment extracted from the text already given by the authors in the answer to reviewer would be good. (6) The style of the references is not kept the same. Please very carefully check the references one by one. Attention the typos which are similar to the comment (1). (7) It is suggested to provide the three tables (‘The experimental parameters of the first group of tests’, ‘The experimental parameters of the second group of tests’, and ‘Orthogonal test results with the uncertainties’) as supplemental material for the paper. Both the average value and the standard deviation should be given in these tables, if it is not ideal to plot the uncertainties in the Figures 8-10. (8) Please check the style of the variable names used in the whole text, including figures and tables. Sometimes they are italic, sometimes not. It is better to keep the style consistent.