Dear Referee #2,

we agree that the rockfall phenomenon is highly random, therefore the impact conditions can be different from those assumed in the test defined in ETAG standard.

Nevertheless, the purpose of the paper is not to investigate the behaviour of a barrier when subjected to an impact that differs from the standard one but, as clearly assessed by the title, to investigate the effect on the barrier behaviour of the deterioration of relevant elements. We think that add more tests simulating different impact conditions will make this assessment less clear for the readers.

The studied problem is important for the public bodies who should have indications on the behaviour of the nets if some deterioration occurs. Moreover, we have also studied different assembly geometries that are important parameters for the job site management.

For this reason, even if we agree that the topic you have highlighted is really important, we think that it is out of the scope of this paper and it could be really the topic of a new work.

Regarding the addition of more graphs to make the paper clearer we propose to add the following figures, showing a comparison of maximum and final elongation of different models. The model c has been chosen because it is the one with the bigger difference between maximum and final elongation.
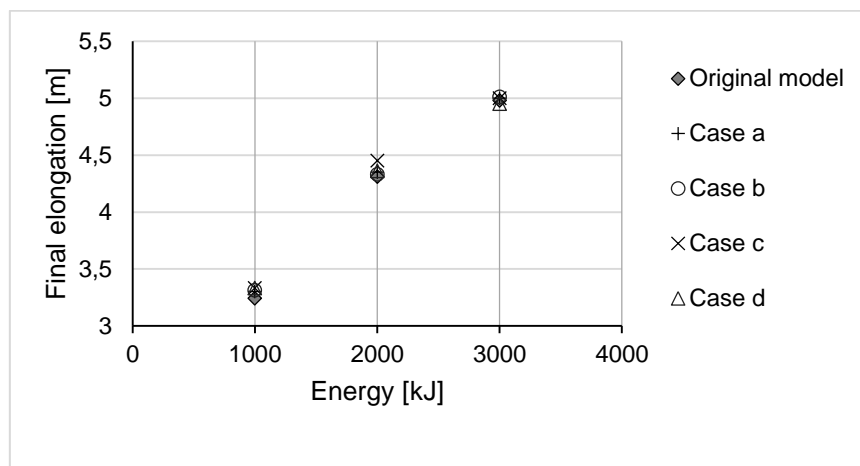
Figure 1 - Comparison of the final elongation of the original model and of models (a), (b), (c) and (d)

Step: Post-imp Frame: 21
Total Time: 0.321003

Step: Post-imp Frame: 400
Total Time: 6.006000
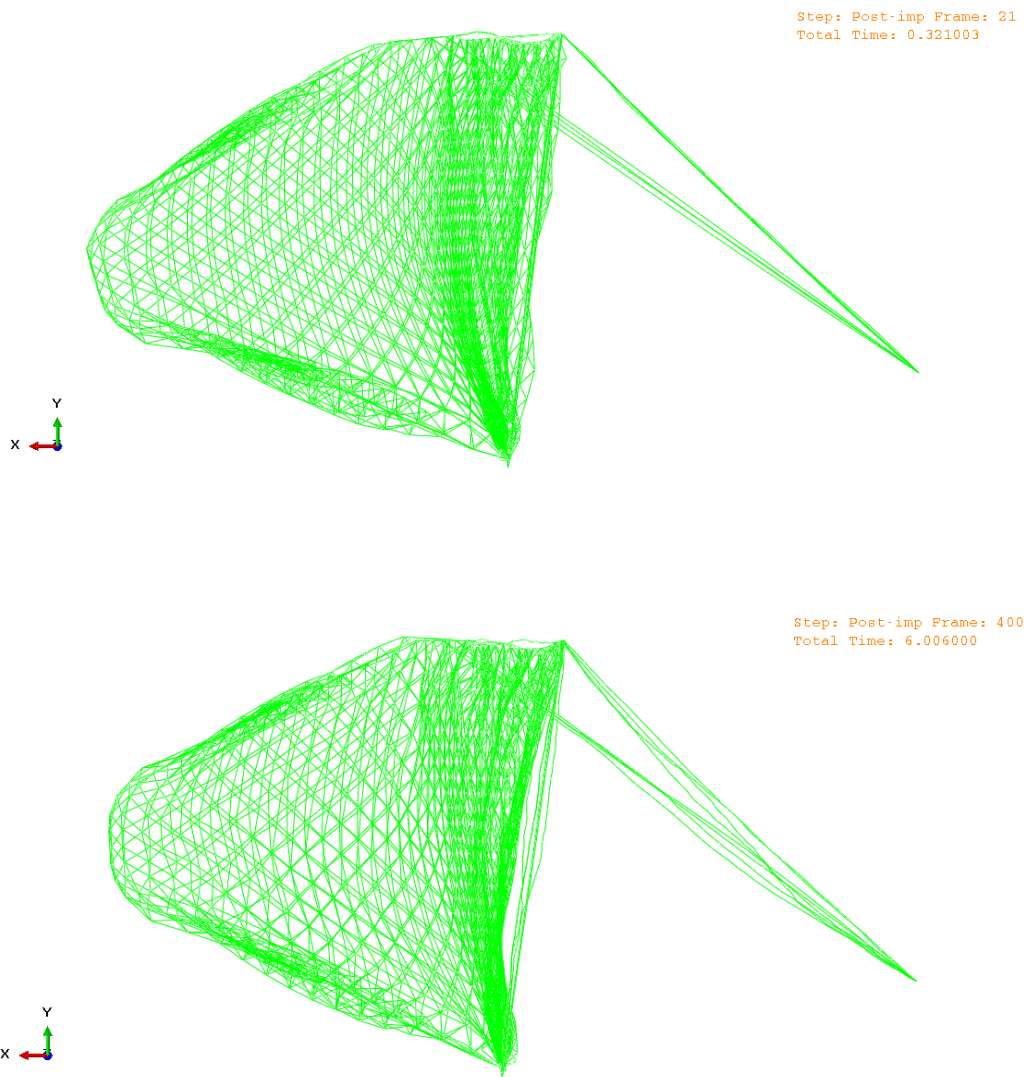
Figure 2 - Comparison between maximum and final elongation of the original model
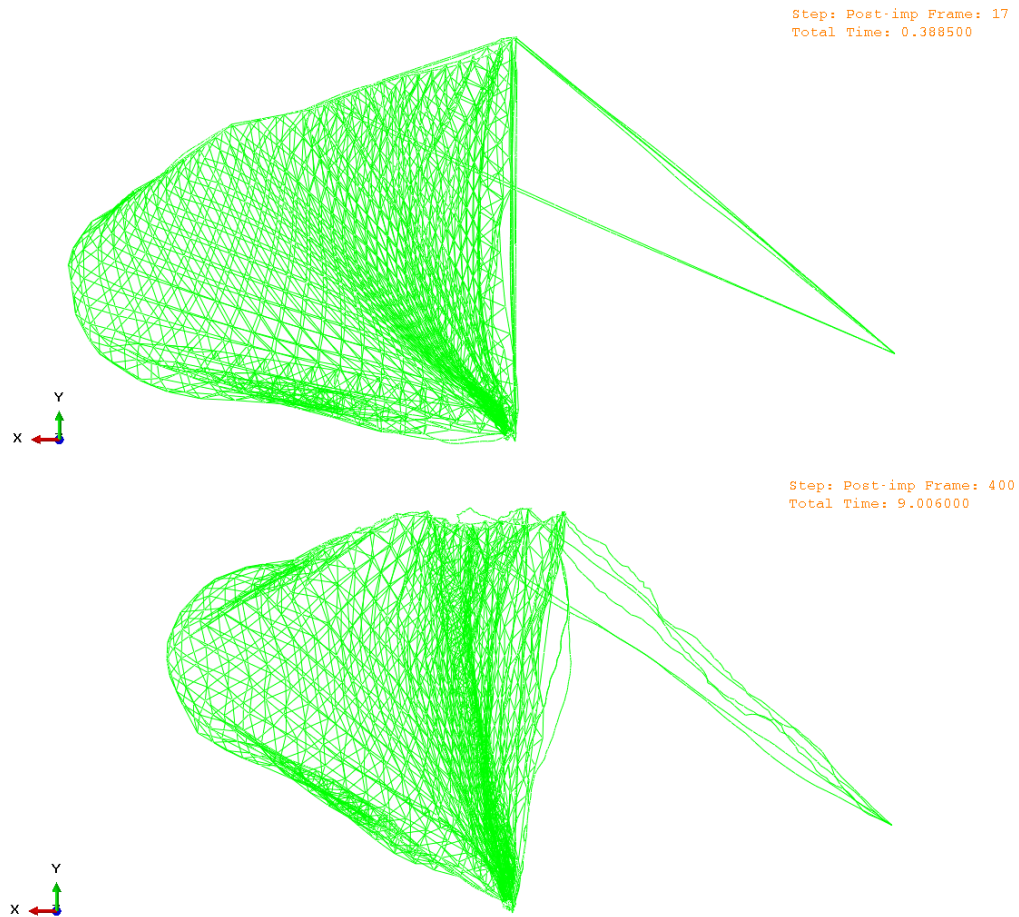
Figure 3 - Comparison between maximum and final elongation of model (c)

The pictures that highlight the state of stress for all the 7 models will really be very heavy for the paper and will not provide further information to the readers. We propose to add the following figure showing the plastic strain in the model at different times during the impact.
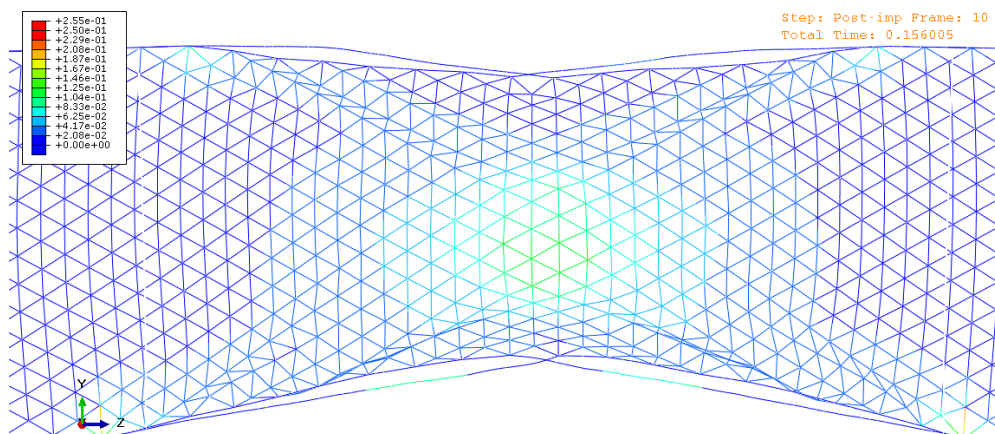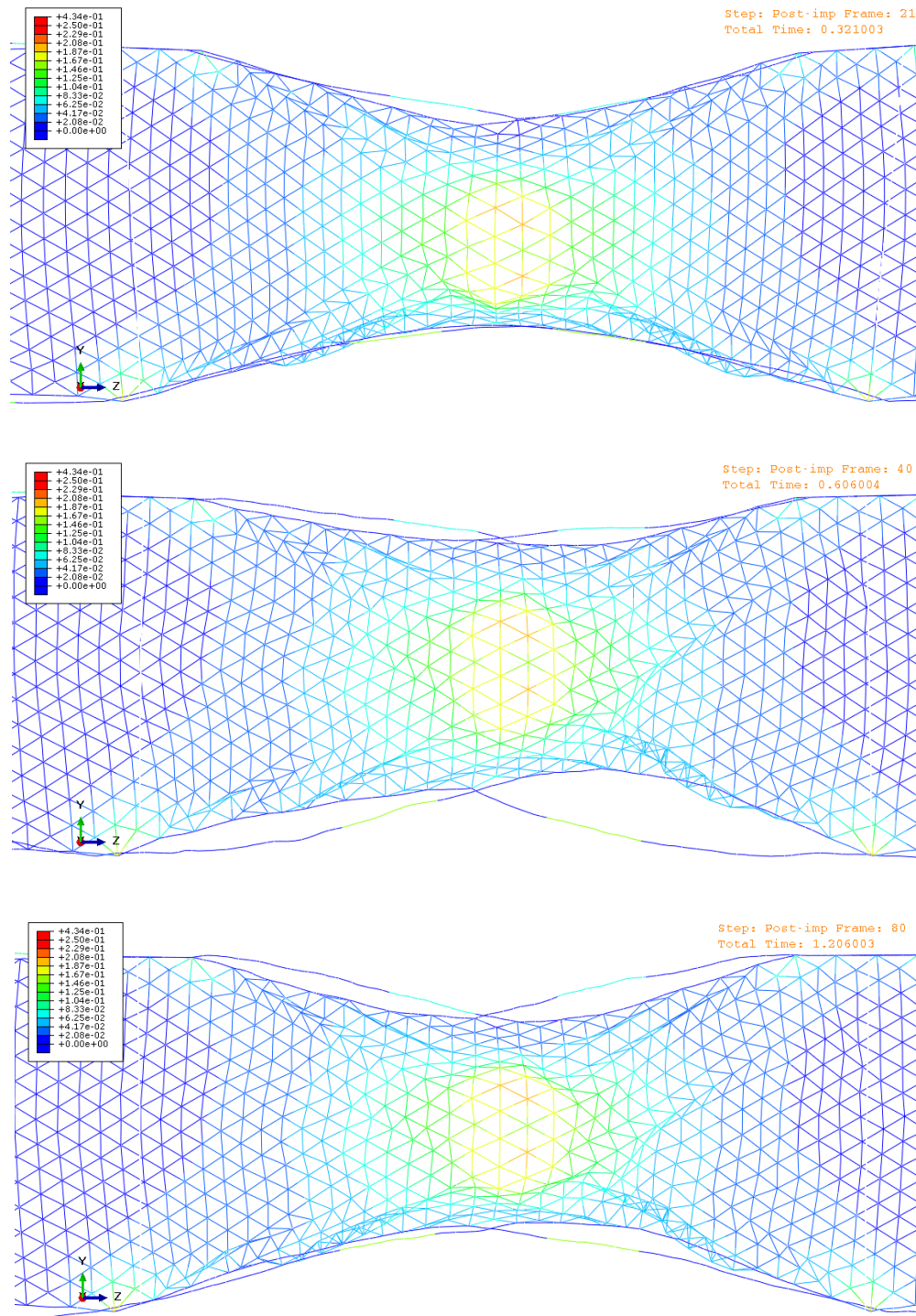
Figure 4 – Comparison of the plastic strain in the central panel of the original model at different times during the impact. The time is in seconds.

Regarding the English language, we are available to review with a mother tongue reviewer the paper before the final submission.