

# **RESPONSE COMPLEMENT TO THE REVIEW #1 OF MANUSCRIPT NUMBER: NHESS-2022-93**

Following the comments on buckling made in this review, a calculation of buckling loads for each type of column of the structure was carried out. The results obtained at the level of the eastern facade are unusually low and suggest that the modeling of this facade, which has been simplified due to lack of data on design features, is not realistic. So, we looked for new information about the dimensions and cross sections of the elements of this facade. We ended up finding a top view of the building on which the characteristics of the supporting columns are provided. The rectangular tubes profiles used in the FE model must finally be replaced by HEA 160 profiles, except around the doors. New simulations taking into account this new information have therefore been carried out. We propose to integrate these new data and results in a revised paper, including more details on the dimensions and sections of the east facade elements, and to no longer mention the virtual model in Annex C.