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Correction

Correction: Fujii, K. Pushover-Based Seismic Capacity Evaluation of Uto City Hall Damaged by the 2016 Kumamoto Earthquake. *Buildings* 2019, *9*, 140

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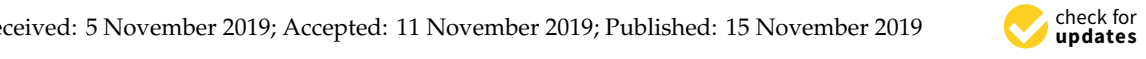


It is very unfortunate that there are some errors in the nonlinear analysis program used for this published article [1]: The subroutine of calculating the damping matrix for nonlinear time-history analyses is incorrect. Therefore, the author wishes to make the following corrections.

1. Corrections 1: Section 3.2.

The author would like to correct the following lines:

"The damping matrix is assumed to be proportional to the initial stiffness matrix, with 5% of the first mode's critical damping."

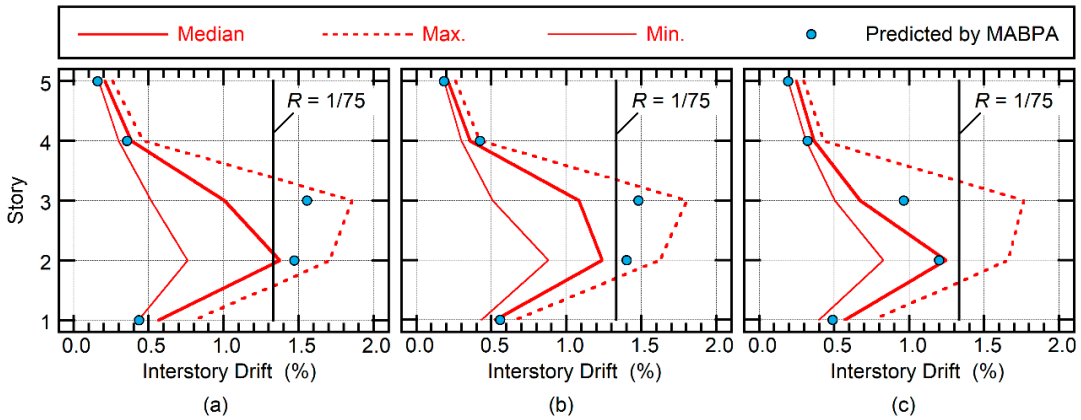
To describe the damping matrix assumed in the nonlinear time-history analysis correctly, the author would like to make the following corrections.

"The damping matrix is assumed to be proportional to the tangent stiffness matrix, with 5% of the first mode's critical damping. Note that, when its tangent stiffness is negative, non-zero dummy positive value (10^{-9} times smaller than the initial stiffness) is used for the calculation of the damping matrix to avoid the negative damping."

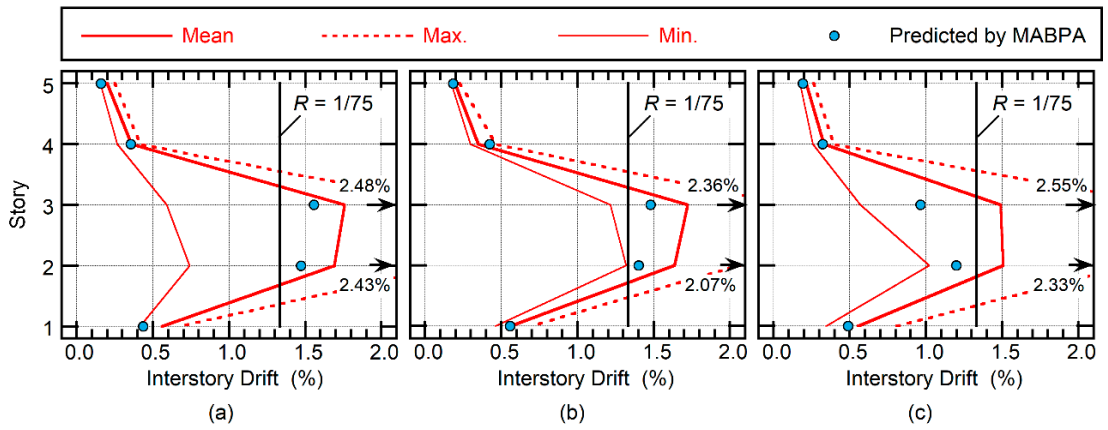
2. Corrections 2: Section 4.3.2. (Figures 22 and 23)

Due to the corrections of the nonlinear analysis program, the author wishes to replace these figures as follows.

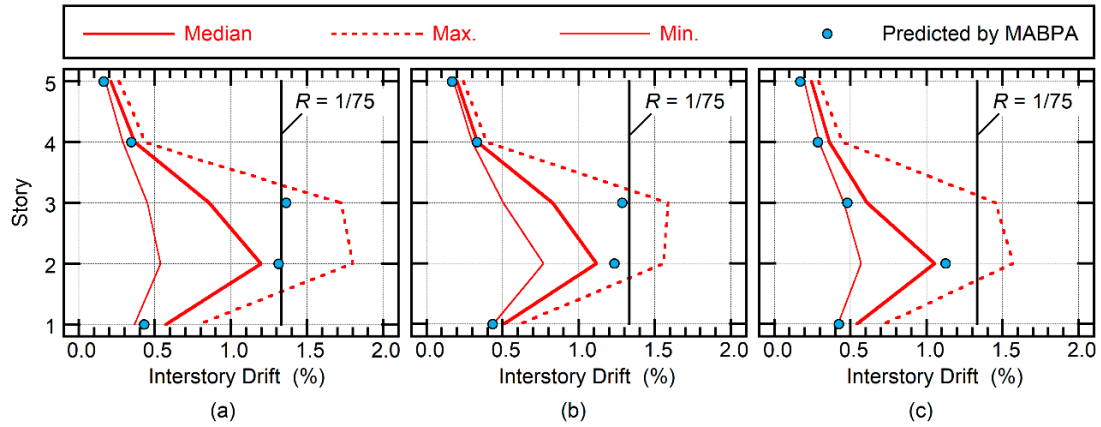
Original image of Figure 22:



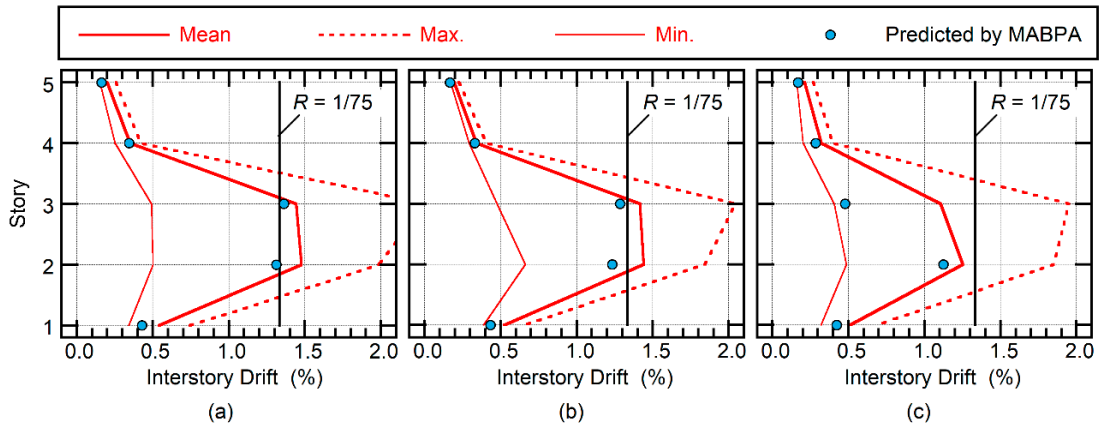
Revised image of Figure 22:



Original image of Figure 23:



Revised image of Figure 23:



3 Corrections 3: Section 4.3.2.

The author would like to correct the following lines:

"When $\lambda = C_{I,uni} = 0.361$, the median value of the peak drift at column A_1B_1, where the largest drift occurred, slightly exceeded its drift limit ($R = 1/75$), as shown in Figure 22. In addition, the predicted peak drift by MABPA exceeds its drift limit ($R = 1/75$) at column A_1B_1 and A_3B_1. While in

the case of $\lambda = C_{I,bi} = 0.330$, the median peak drift values for all three columns were within the drift limit, as shown in Figure 23. In addition, the predicted peak drift by MABPA is very close to $R = 1/75$ at column A_1B_1.

Therefore, the accuracy of the evaluated seismic capacity index for this building was satisfactory. Moreover, index $C_{I,bi}$ had a slightly conservative value, while the value of index $C_{I,uni}$ was not conservative. Also note that the accuracy of the predicted peak drift by MABPA for this building was satisfactory."

Due to the replacement of Figures 22 and 23, the author would like to make the following corrections.

"When $\lambda = C_{I,uni} = 0.361$, the mean value of the peak drift at all three columns notably exceeded its drift limit ($R = 1/75$), as shown in Figure 22. In addition, the predicted peak drift by MABPA exceeds its drift limit ($R = 1/75$) at column A_1B_1 and A_3B_1. While in the case of $\lambda = C_{I,bi} = 0.330$, the mean peak drift at column A_1B_1 and A_3B_1 was closer to the drift limit than the case of $\lambda = C_{I,uni} = 0.361$, as shown in Figure 23. In addition, the predicted peak drift by MABPA is very close to $R = 1/75$ at column A_1B_1.

Therefore, the accuracy of the evaluated seismic capacity index for this building was satisfactory. Moreover, index $C_{I,bi}$ was better than index $C_{I,uni}$ because in this building, the effect of bidirectional excitation was significant. In addition, note that the accuracy of the predicted peak drift by MABPA for this building was satisfactory."

4 Corrections 4: Section 6.

The author would like to correct the following lines in the first conclusion:

"The results show that the accuracy of the evaluated seismic capacity index for this building was satisfactory. Moreover, index $C_{I,bi}$ had a slightly conservative value, while whereas index $C_{I,uni}$ did not have a conservative value."

Due to the replacement of Figures 22 and 23 in Section 4.3.2, the author would like to make the following corrections.

"The results show that the accuracy of the evaluated seismic capacity index for this building was satisfactory. Moreover, index $C_{I,bi}$ was better than index $C_{I,uni}$ because in this building, the effect of bidirectional excitation was significant."

The corresponding author apologizes for any inconvenience caused to the readers. The changes do not affect other scientific results and conclusions. The manuscript will be updated, and the original will remain available. A link to this Correction will be added.

References

1. Fujii, K. Pushover-Based Seismic Capacity Evaluation of Uto City Hall Damaged by the 2016 Kumamoto Earthquake. *Buildings* **2019**, *9*, 140. [CrossRef]