



Erratum Article

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CORRECTION / ERRATUM ARTICLE

The effects of different storey heights on structural behavior of RC buildings according to 1998 and 2018 Turkish earthquake codes: comparative study

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CORRECTION / ERRATUM ARTICLE

Correction to be made:

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Reason for correction request:

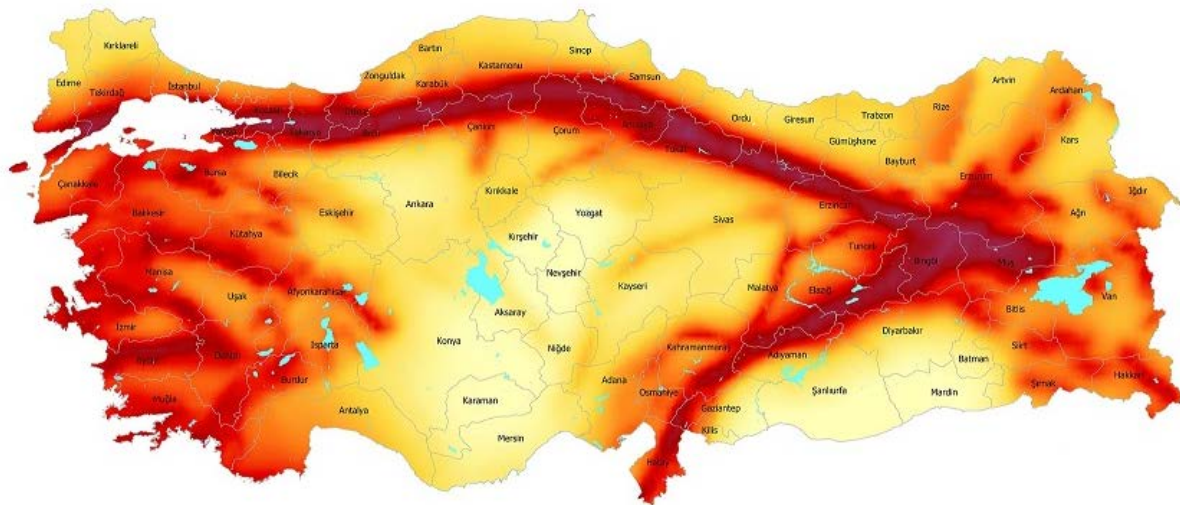
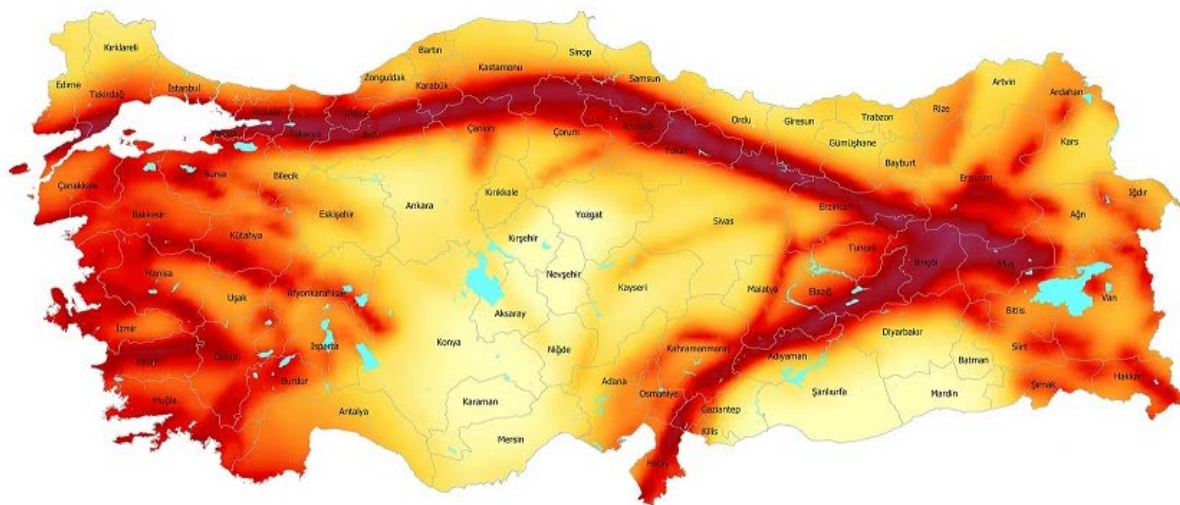
A correction request has been submitted by the authors of the article entitled “The effects of different storey heights on structural behavior of RC buildings according to 1998 and 2018 Turkish earthquake codes: comparative study” (Journal of Innovative Engineering and Natural Science, Vol. 5, No. 2, pp. 467–476, 2025).

The author reported two minor typographical issues identified after publication. First, although the source of Figure 1 (2018 Earthquake Hazard Map) was correctly cited in the initial submission, it was inadvertently omitted in the final published version due to a technical error during the revision and reference formatting process. Second, an unused abbreviation expression (Plan I (REF) D=3) was mistakenly omitted on page 471 during the manuscript preparation stage.

After reviewing the author’s request, the editorial board has determined that these issues are limited to typographical and referencing details and do not affect the scientific content, results, or conclusions of the article. Accordingly, the journal has decided to publish this correction notice to inform readers of the relevant amendments.

This notice is provided for the information of readers and users.

The correction request for this article was reviewed by the journal editors Hasan Sesli, Muhammet Çelik, and İdris Karagöz, and the validity of the request was confirmed. With the positive views of the other editors on the editorial board, it has been decided that the correction article will be published in the January 2026 issue.

Correction 1 – Figure Reference**Before (published):****Figure 1.** 2018 Earthquake hazard map**After (corrected):****Figure 2.** 2018 Earthquake hazard map [15]

Note: The reference was correctly included in the initial submission but was inadvertently omitted by the author during the revision process.

Correction 2 – Removal of an Unused Abbreviation (Page 471)**Before (published):**

The unused abbreviation expression “(Plan I (REF) D = 3)” appears on page 471.

4. In the analysis, the concrete class was selected as C30/37 and the steel class as B420C. For TBEC-2018, DD-2 was selected as the Design Earthquake Ground Motion Level. Since the building type is residential, the importance factor (I) is taken as 1. Building Height Class (BYS) was taken from the relevant table in TBEC-2018 depending on the building height and Earthquake Design Class (EDC). The Overstrenght Factor (D) is 2.5 in both directions (Plan I (REF) D=3), and the Earthquake Design Class (DTS) is taken from the relevant tables in TBEC-2018 depending on the Building Usage Class (BKS) and the Short Period Design Spectral Acceleration coefficient (SDS=1.351). Design and analysis of the structure were performed using the SAP2000 structural analysis program. The seismic loads calculated according to TBEC-2018, and 1998 Earthquake Regulation was defined, and the dynamic analysis of the structure was carried out separately. In addition, torsional moments of at least $\pm 5\%$ eccentricity at the geometric center of the structure, depending on the seismic forces acting on the floors, were included in the calculations.

After (corrected):

The expression “(Plan I (REF) D = 3)” has been removed from page 471.

4. In the analysis, the concrete class was selected as C30/37 and the steel class as B420C. For TBEC-2018, DD-2 was selected as the Design Earthquake Ground Motion Level. Since the building type is residential, the importance factor (I) is taken as 1. Building Height Class (BYS) was taken from the relevant table in TBEC-2018 depending on the building height and Earthquake Design Class (EDC). The Overstrenght Factor (D) is 2.5 in both directions, and the Earthquake Design Class (DTS) is taken from the relevant tables in TBEC-2018 depending on the Building Usage Class (BKS) and the Short Period Design Spectral Acceleration coefficient (SDS=1.351). Design and analysis of the structure were performed using the SAP2000 structural analysis program. The seismic loads calculated according to TBEC-2018, and 1998 Earthquake Regulation was defined, and the dynamic analysis of the structure was carried out separately. In addition, torsional moments of at least $\pm 5\%$ eccentricity at the geometric center of the structure, depending on the seismic forces acting on the floors, were included in the calculations.

Note: The abbreviation expression was included inadvertently by the authors during manuscript preparation and is not used elsewhere in the article. Its removal does not affect the scientific content, results, or conclusions of the study.

Correction 3 – Reference reordering and inclusion of a new reference**Before (published):**

With the inclusion of the newly added reference [15] for Figure 1, the order of the references has been updated. The previous citation format is provided below.

REFERENCES

13. Döndüren MS, Hava Ş, Ecemiş AS (2021) Betonarme bir binanın eşdeğer deprem yükü yöntemi ile DBYBHY 2007 ve TBDY 2018 yönetmeliklerine göre analizi. Konya Journal of Engineering Sciences 9:327-342. <https://doi.org/10.36306/konjes.867309>
14. Öztürk MT (2009) Eski Deprem Yönetmeliklerine Göre Boyutlandırılan Betonarme Binaların Güncel Yönetmeliğe Göre Deprem Performansının Belirlenmesi. Yüksek Lisans Tezi, İstanbul Teknik Üniversitesi.
15. Structural Analysis and Design Program (2024) SAP2000, Computers and Structures Inc., New York, USA.

In this study, 6-storey reinforced concrete structures with different storey heights (2.80m, 3.00m and 3.20m) were modeled using SAP2000 [15]. Structural analysis was carried out when earthquake loads were applied to these structures according to the 1998 and 2018 earthquake regulations. The period, maximum displacement values, relative storey drifts, base shear forces and torsional irregularity coefficients obtained because of the analyses were compared.

After (corrected):

The reference citation has been updated and is provided below.

REFERENCES

14. Öztürk MT (2009) Eski Deprem Yönetmeliklerine Göre Boyutlandırılan Betonarme Binaların Güncel Yönetmeliğe Göre Deprem Performansının Belirlenmesi. Yüksek Lisans Tezi, İstanbul Teknik Üniversitesi.
15. AFAD, Earthquake Department of the Disaster and Emergency Management Presidency, Turkey Earthquake Hazard Map, Ankara, Türkiye. <https://www.afad.gov.tr/>
16. Structural Analysis and Design Program (2024) SAP2000, Computers and Structures Inc., New York, USA.

In this study, 6-storey reinforced concrete structures with different storey heights (2.80m, 3.00m and 3.20m) were modeled using SAP2000 [16]. Structural analysis was carried out when earthquake loads were applied to these structures according to the 1998 and 2018 earthquake regulations. The period, maximum displacement values, relative storey drifts, base shear forces and torsional irregularity coefficients obtained because of the analyses were compared.

Note: This correction is limited to the renumbering/reordering of the references following the addition of a new reference for Figure 1. It does not affect the scientific content, results, or conclusions of the article.