



Source: <https://www.scientificamerican.com/article/why-the-earthquake-in-turkey-was-so-damaging-and-deadly/>

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2023 Turkey Earthquake – Performance of Structures and Causes of failures



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The two major recent earthquakes M7.8 and M7.7, on 6th February 2023 in Turkey resulted in significant loss of life, considerable damage to several multi-storeyed buildings and a huge economic loss. In this context, it might be prudent to ask questions like “What was the building typology in the affected areas?” and “How did the major buildings in these areas performed during the earthquake?”. Also being located at the junction of active faults, one may ask “What were the critical seismological features of this earthquake?” and “Were the code specified design forces adequate for an event of this magnitude?”. Since more than 1,20,000 buildings have reportedly collapsed or are heavily damaged, it becomes important to ask “What were some of the common causes of failures and how can these failures be avoided in future?” and “Can we learn something from these failures?” This talk attempts to answer the above-mentioned questions based on a brief reconnaissance of the affected area done by the speaker in May 2023 and the study of available literature on the 2023 Turkey earthquake.

Venue: U01-201 (above canteen), CEPT University

For attending this lecture online, click on the registration link:

<https://cept-ac-in.zoom.us/meeting/register/tZApfumuqTksG9Hi1hMzThHMF7v07FeVBvX4>