

Abstract Submitted
for the OSF17 Meeting of
The American Physical Society

Replicating Ohio's Earthquakes in Physics Classes¹ FREDERICK THOMAS, Retired — Ohio's earthquakes may lack the drama of those in California, but the state is within range of the New Madrid hazard zone and Ohio has its own earthquake hazard zones in the west-central and north-eastern regions—each with a history of producing quakes near or above magnitude 5. A quake in 1986 is particularly interesting in that it (a) occurred near the Perry Nuclear Power Plant and produced accelerations which exceeded the plant's design specifications and (b) was likely induced by a nearby waste injection well. Activities will be described to engage students in exploring how scientists and engineers use an online USGS tool to link earthquake hazard to building codes and in exploring why acceleration and possible resonant frequencies are more important design considerations than an earthquake's Richter magnitude.

¹Based in part on NSF-ATE Grants No. DUE-0202202 and DUE-1003381

Frederick Thomas
Retired

Date submitted: 14 Sep 2017

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