The November 12, 2017 magnitude 7.3 earthquake near the border of Iraq and Iran occurred at a mid-crustal depth of ~25 km within the Arabian tectonic plate, near the Eurasian-Arabian plate boundary. Very strong shaking was experienced (see modeled intensities, inset on left, and Felt Reports, below) from this earthquake: large buildings in nearby cities in Iraq and Iran have been extensively damaged or destroyed, and hundreds of deaths have been reported.

Fault rupture took ~40s to complete.

Slip of up to 7 m may have occurred (at ~25 km depth).

KSSMN Seismograms (~10,500 km away)

“P” marks arrival times of primary body-waves across Kentucky. Peak up-and-down surface-wave displacement recorded at EK26 is labeled.