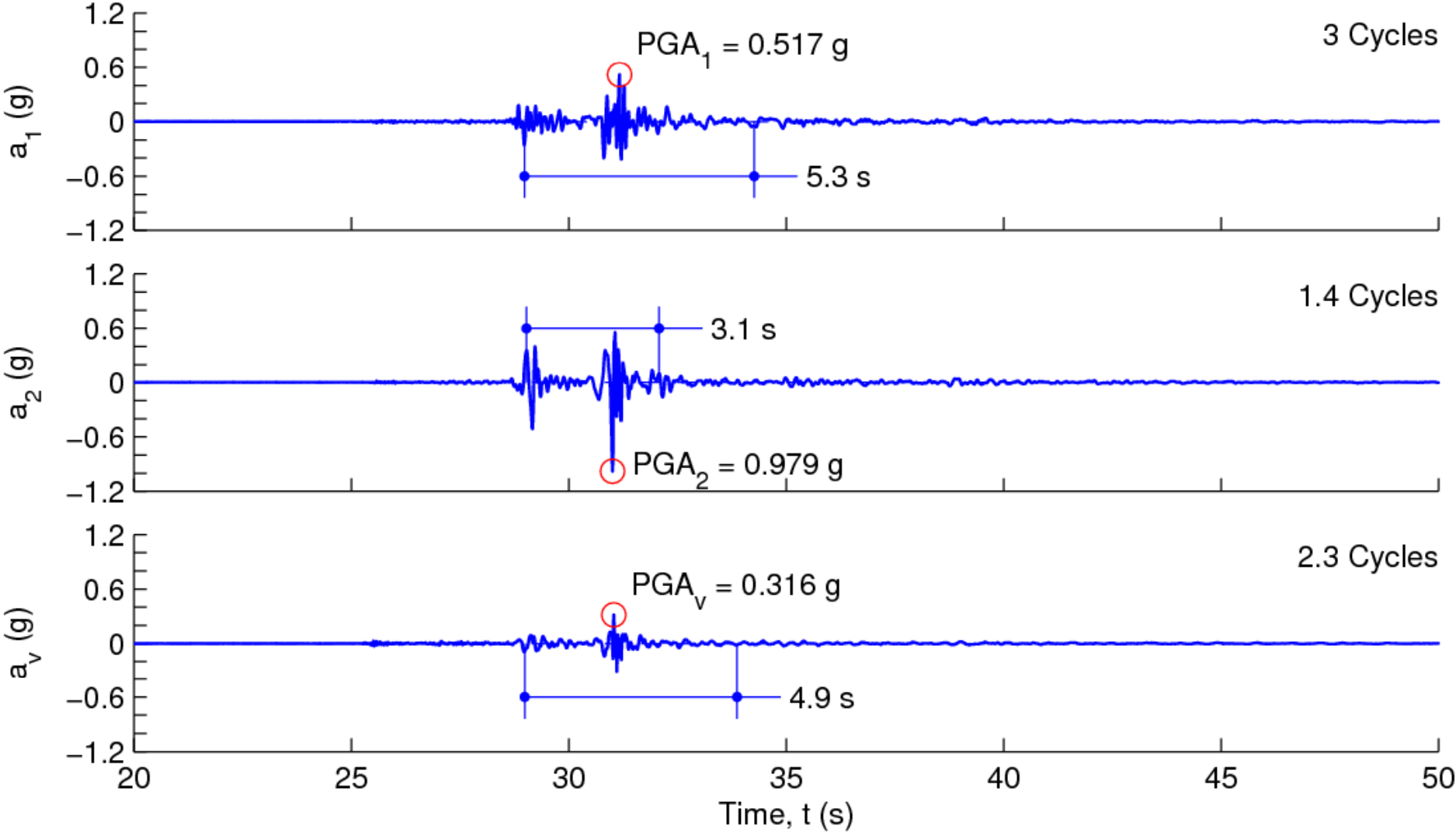


StrongMotions
Knowledge and Clarity **Inc.**

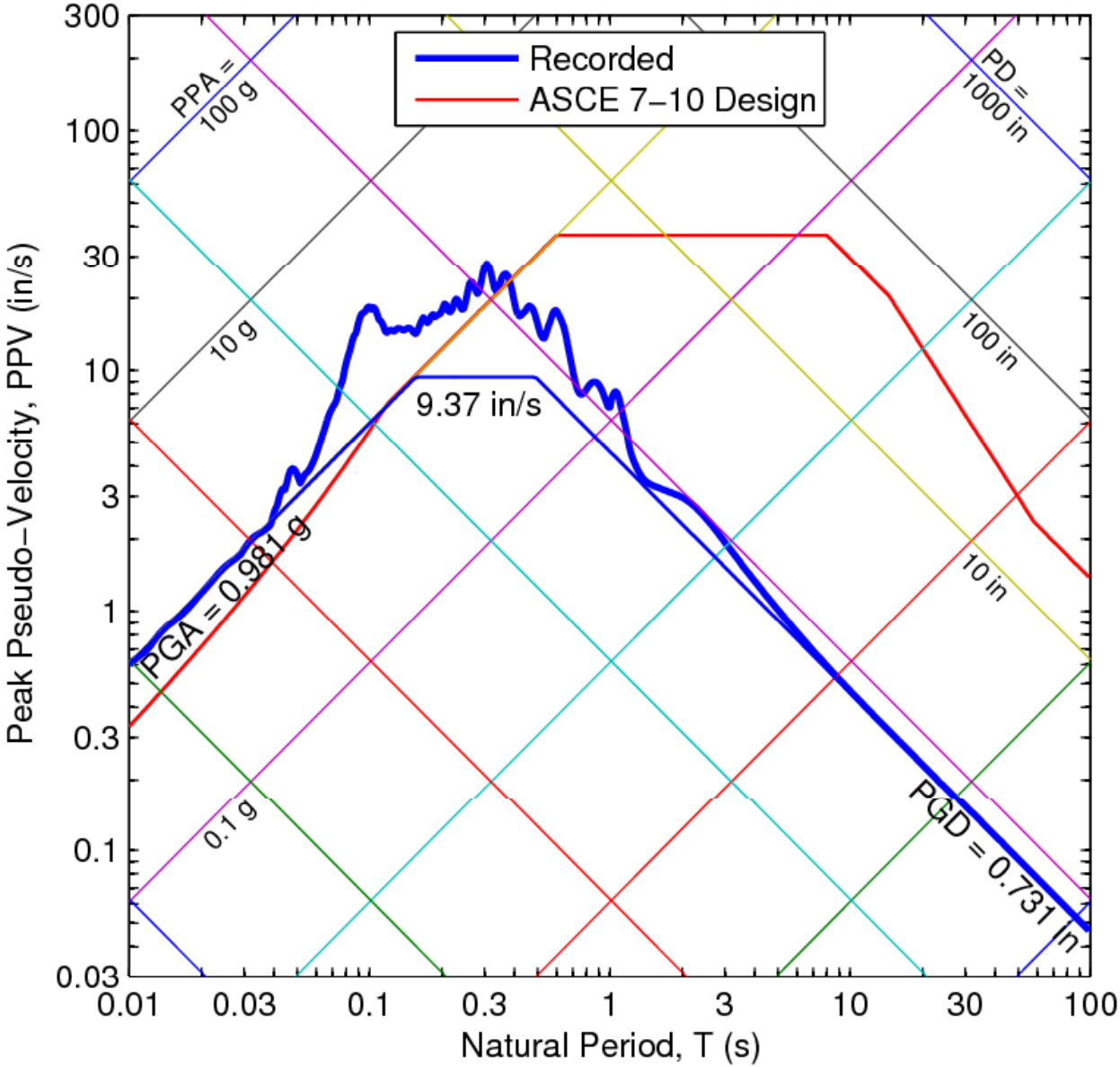
Ground Motions from **M6** South Napa Earthquake of 24 August 2014

August 27, 2014

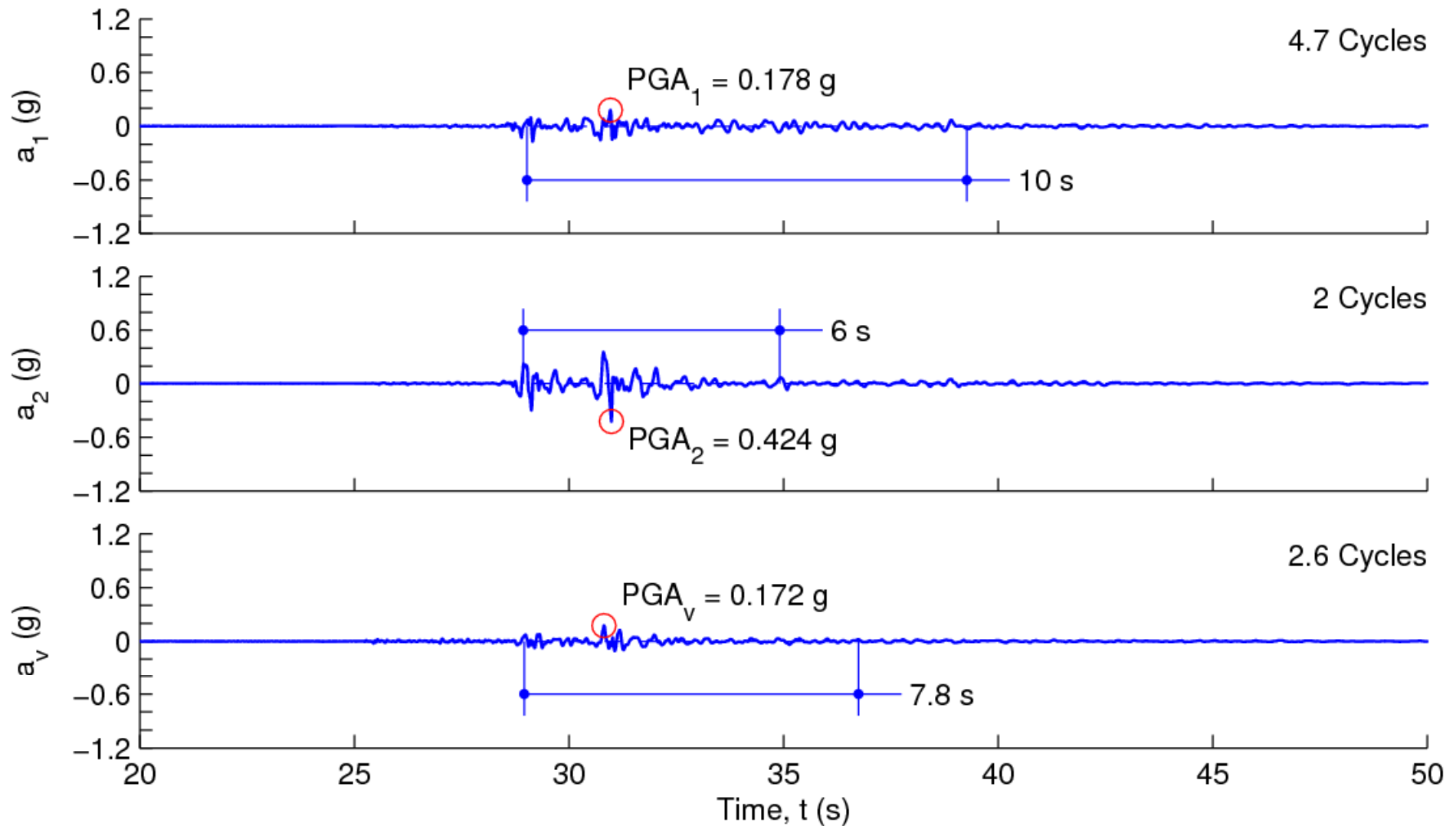
Acceleration Histories at Station 68206 – Soil Site (12 miles from Epicenter)



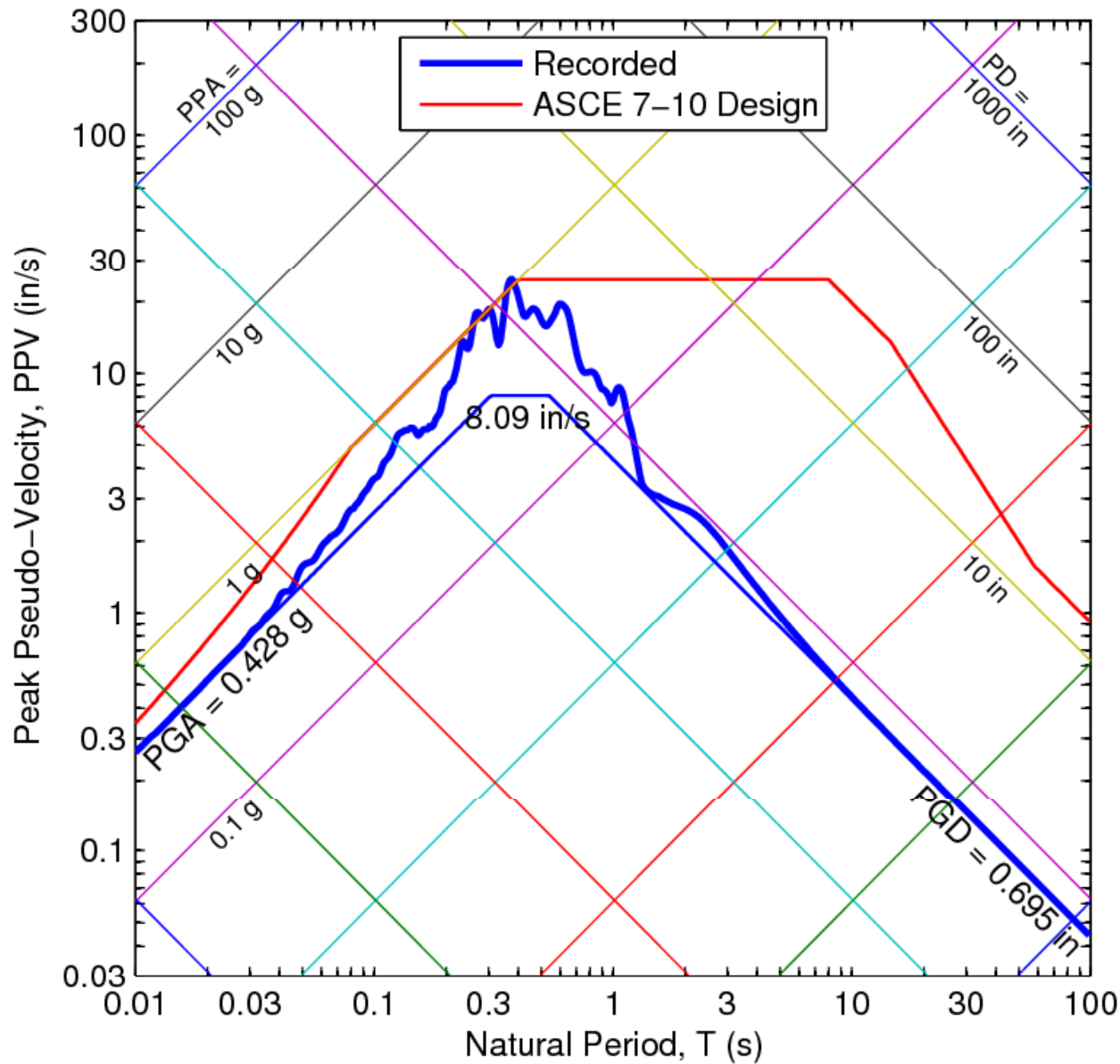
Recorded and Design Response Spectra



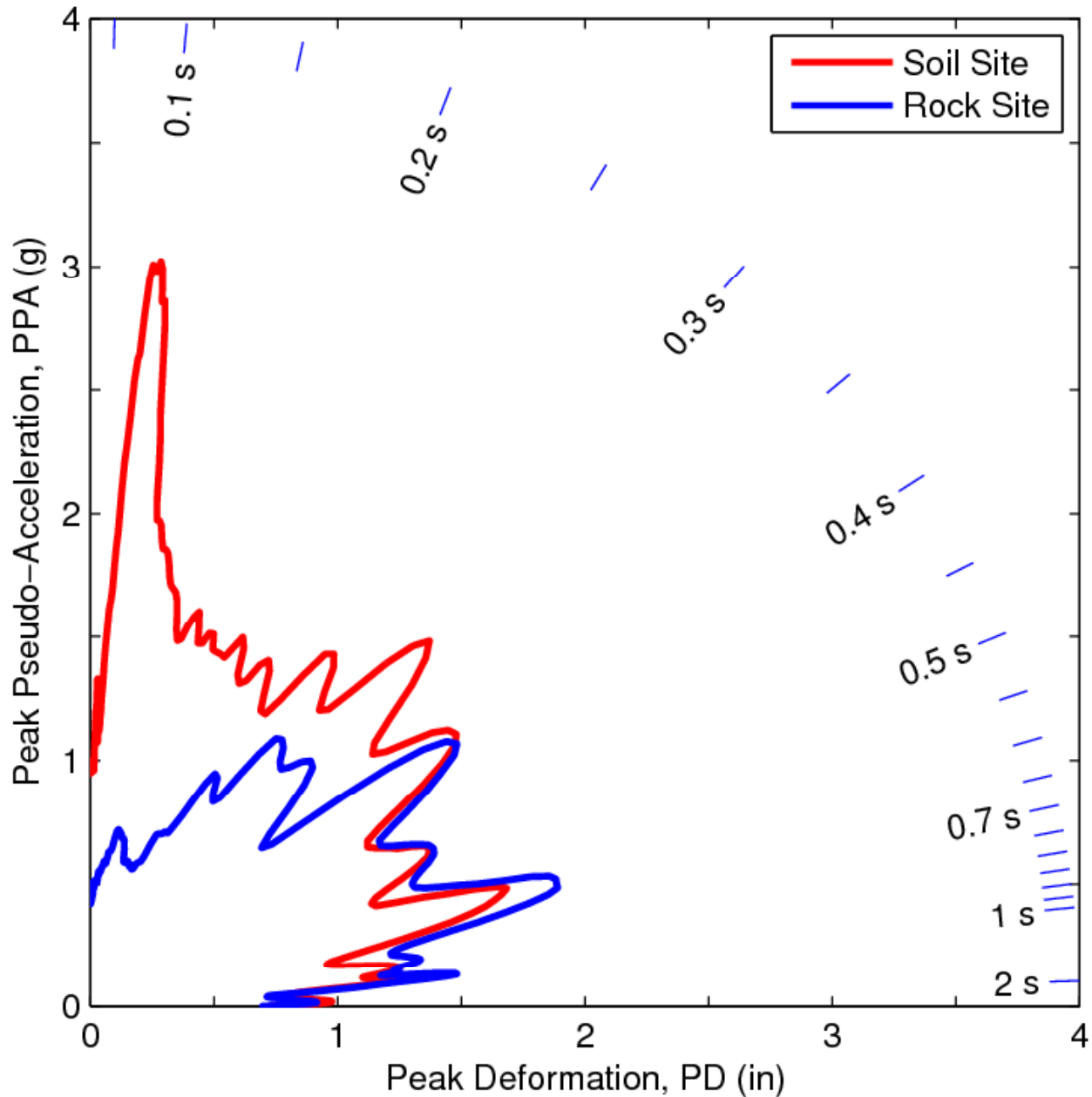
Acceleration Histories at Station 68259 – Rock (?) Site (12 miles from Epicenter)



Recorded and Design Response Spectra



Acceleration-Deformation Plots of Response Spectra



Preliminary Conclusions

- Although acceleration demands were high in some places, the deformation and cyclic demands were quite low
- As a result, the motions were damaging only to stiff and brittle systems
- The design event is roughly **M6.7** at 8 miles
- Recorded motions were below the building-code design values
- Significant property losses (> 1 billion dollars) occurred even below the prevailing design ground motions