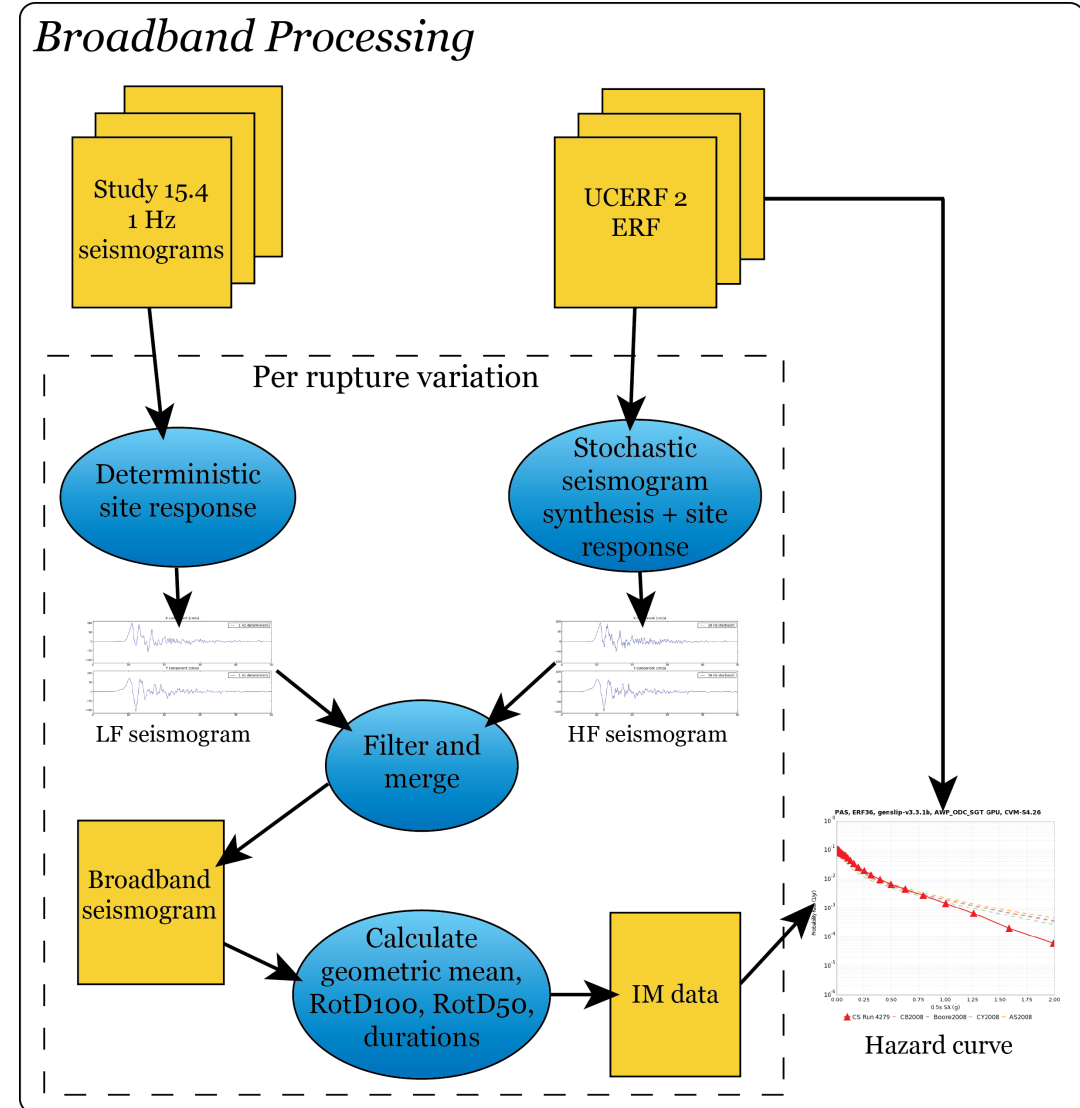
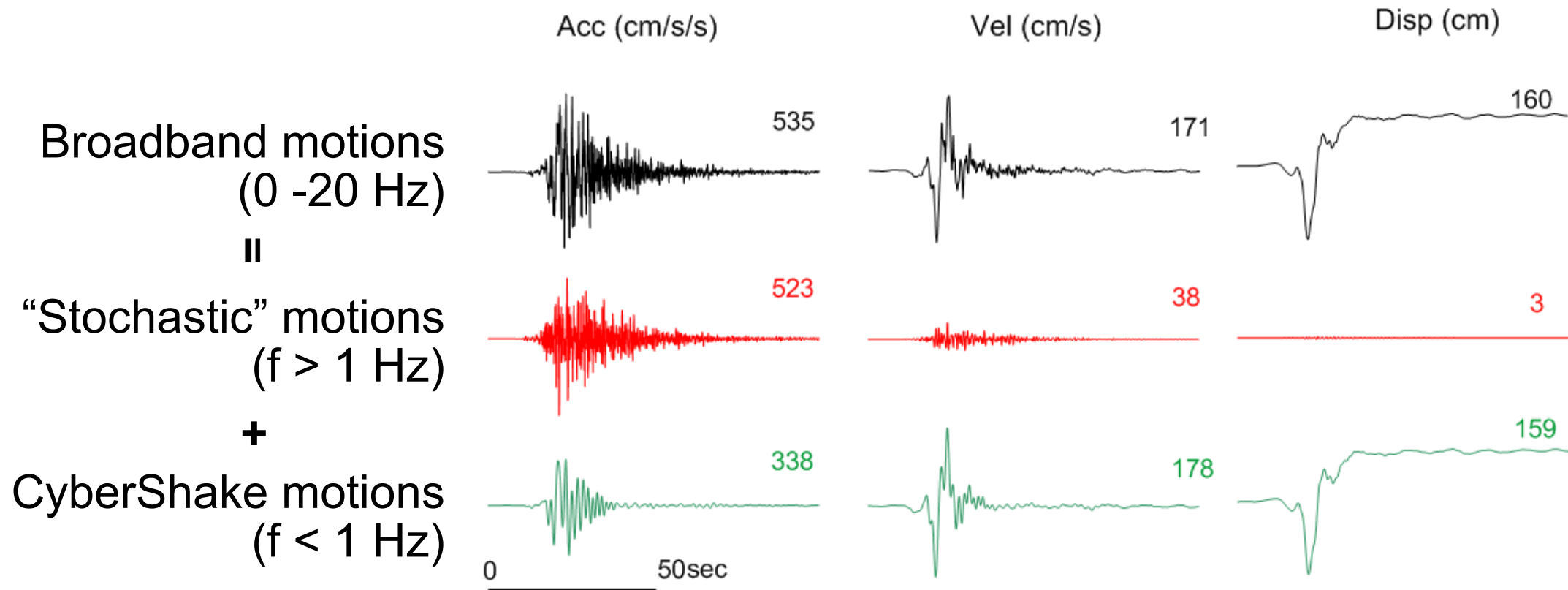


Broadband Time Series from CyberShake

- Combines two computational platforms-
 - CyberShake Platform
 - Broadband Platform (including site response)
- CyberShake: low frequency ($f < 1$ Hz)
"Deterministic"
- Broadband: high frequency ($f > 1$ Hz)
"Stochastic"
- Results in broadband (0-20 Hz) time series at CyberShake sites

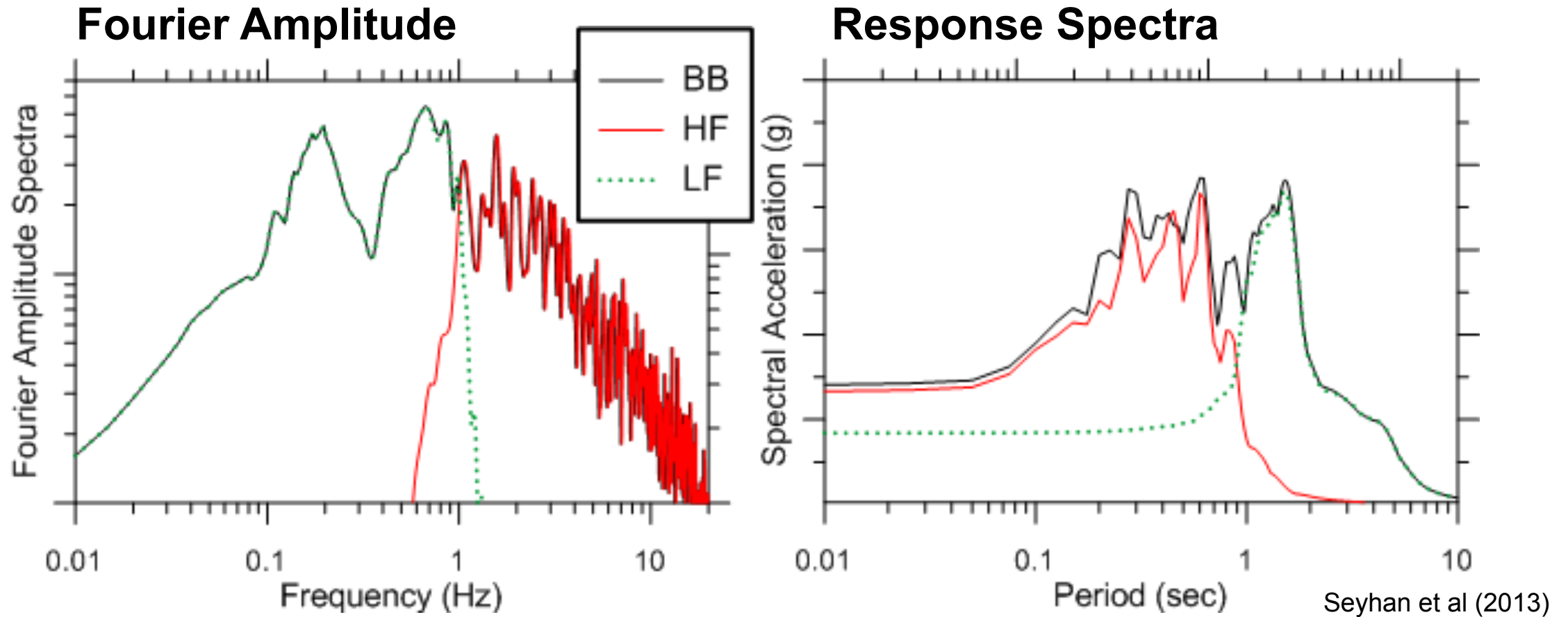


Broadband Time Series from CyberShake



Seyhan et al (2013)

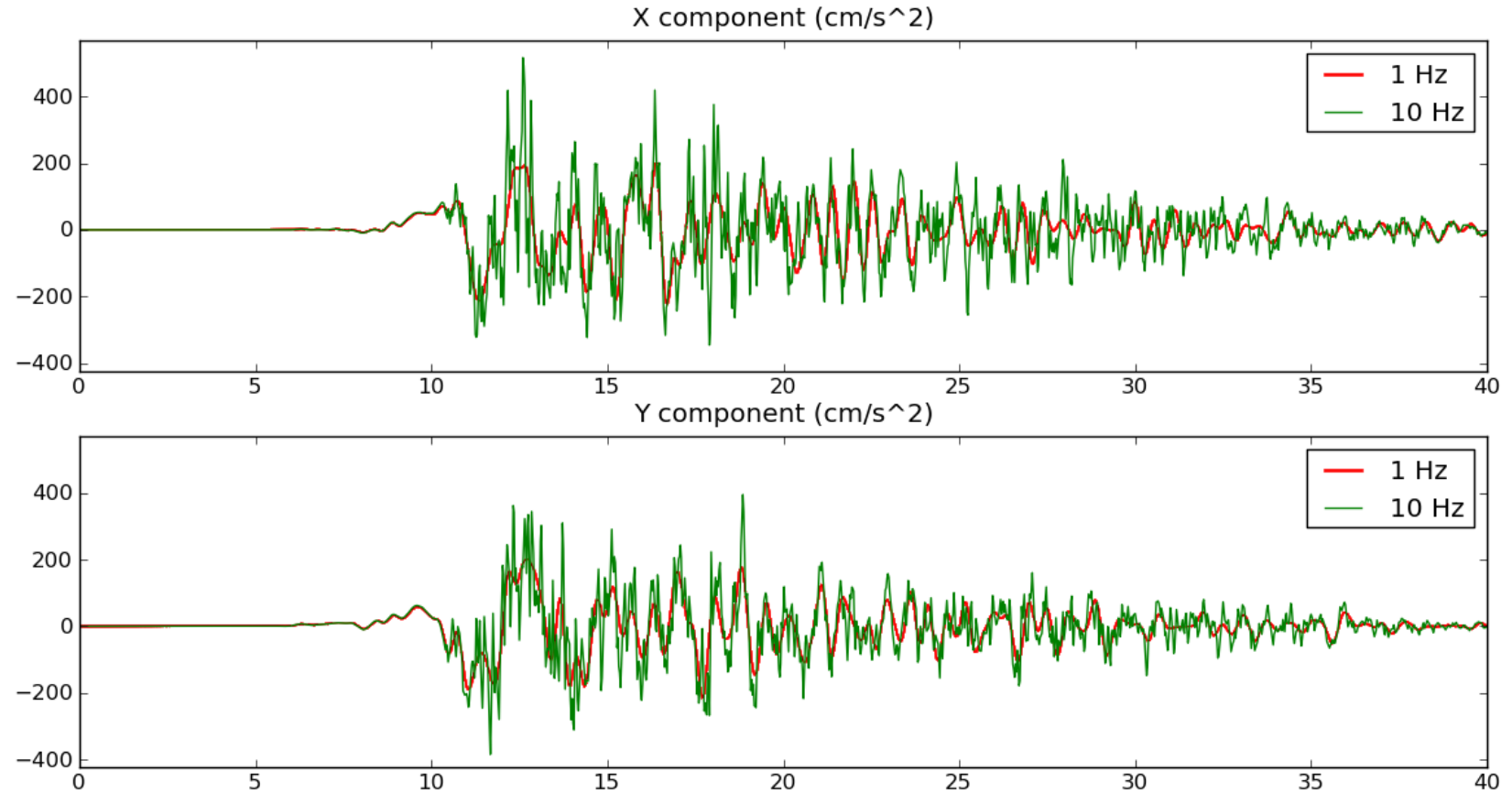
Broadband Time Series from CyberShake



Time domain motions are combined using set of matched filters (1 Hz cross-over)

Broadband Time Series from CyberShake

- Original (blue) and broadband (green) accelerations at PAS for sample rupture
- Time series can be used for dynamic response analysis, etc.
- Note: Generation of broadband motions is not currently part of CyberShake workflow



http://scec.usc.edu/scecpedia/CyberShake_Study_15.12