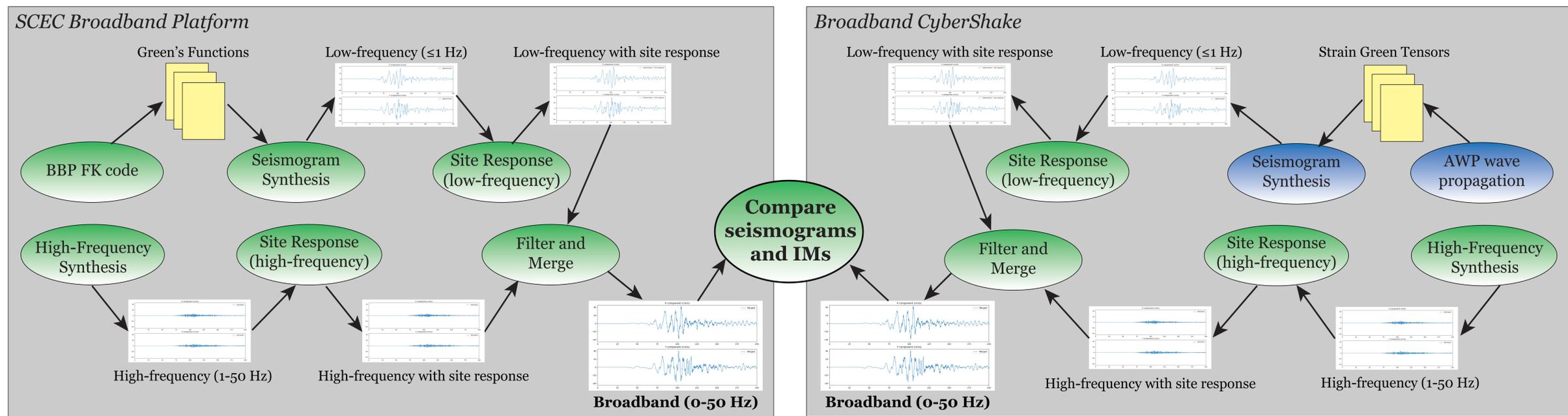


## We have performed verification between Broadband CyberShake and the SCEC Broadband Platform.

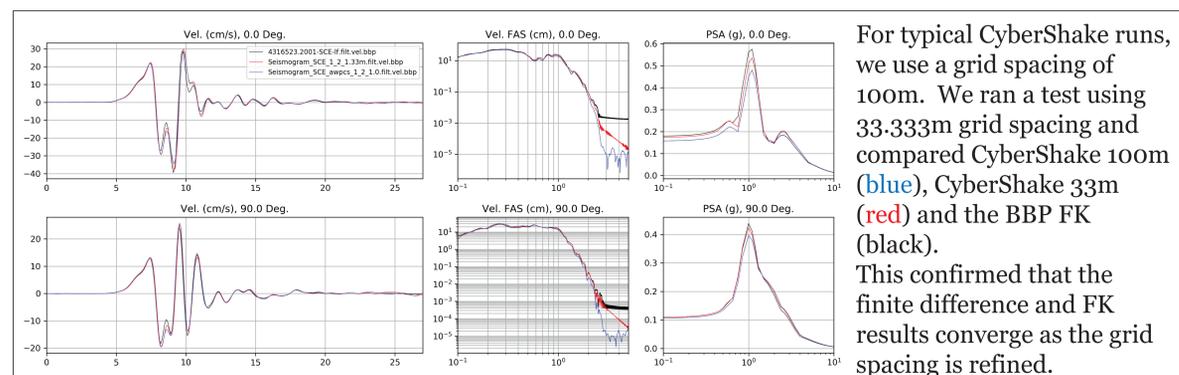
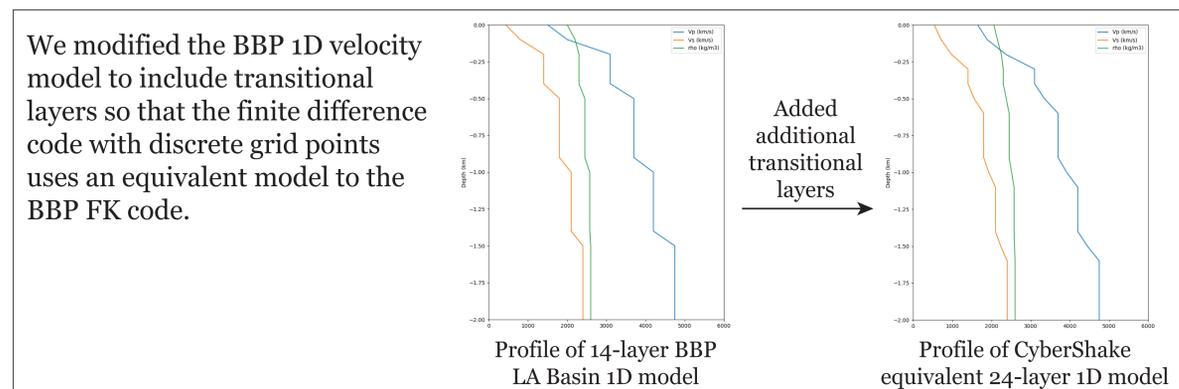
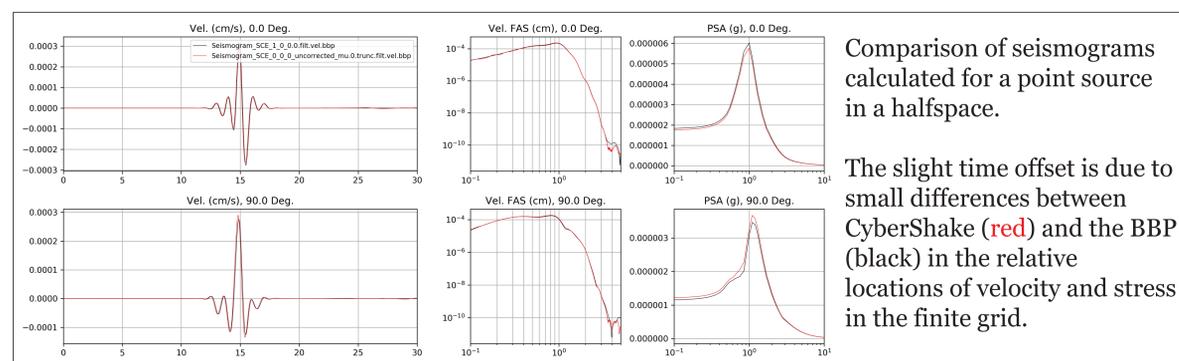
### Verification Workflow

To perform verification between Broadband CyberShake and the SCEC Broadband Platform (BBP), we run both platforms on equivalent simulations and compare the outputs. Note that CyberShake does not produce a vertical component, so all comparisons were done with horizontal components.



### Initial Testing

Results from the BBP and CyberShake are not expected to be identical, as they use different low-frequency codes with different internal assumptions. However, we should be able to explain the observed differences that remain once the problem is defined identically on both platforms. To this effect, we performed an extensive series of tests to isolate the source of differences, a few of which are described below.



### Verification Using the Northridge Event Simulation

We performed 1D simulations using the Northridge event included with the BBP. The Northridge fault trace is roughly outlined in yellow, along with the 10 stations at which we compute simulations on both platforms (these stations correspond to the location of recordings from the 1994 event). No recordings are used in our verification tests.

