



**EARTH &
ENVIRONMENTAL
SCIENCES**

SMAC LBNL Brief Update

May 14, 2018

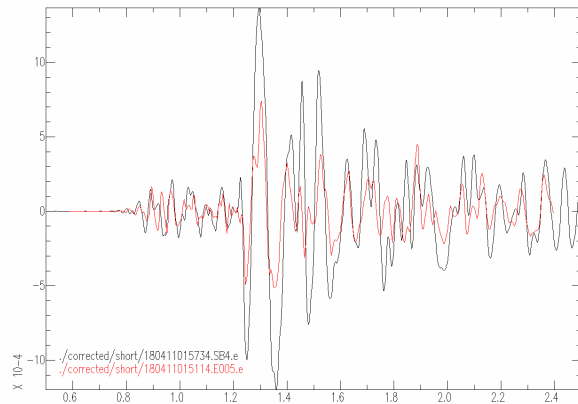
Kurt Nihei

LBNL

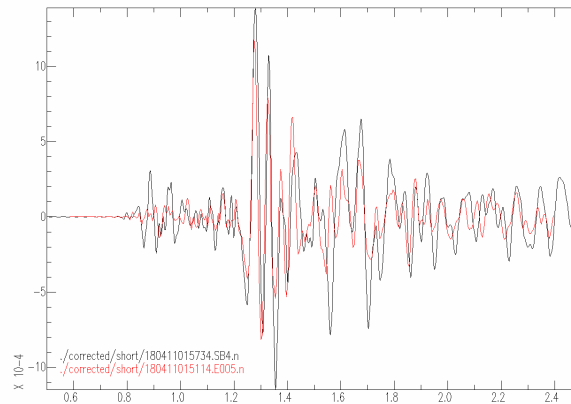


Comparison between LBNL & Jarpe Box (JB) Co-located Stations for M2.4

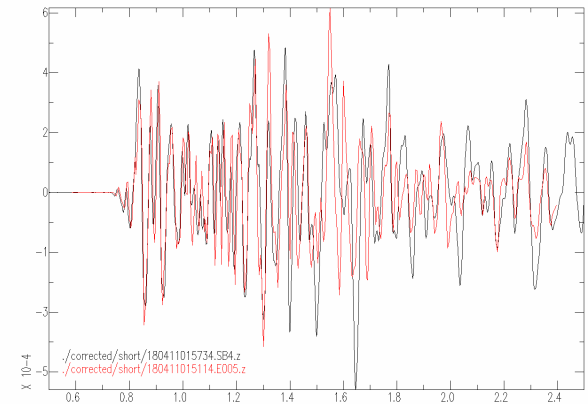
SB4 - East Component



SB4 - North Component

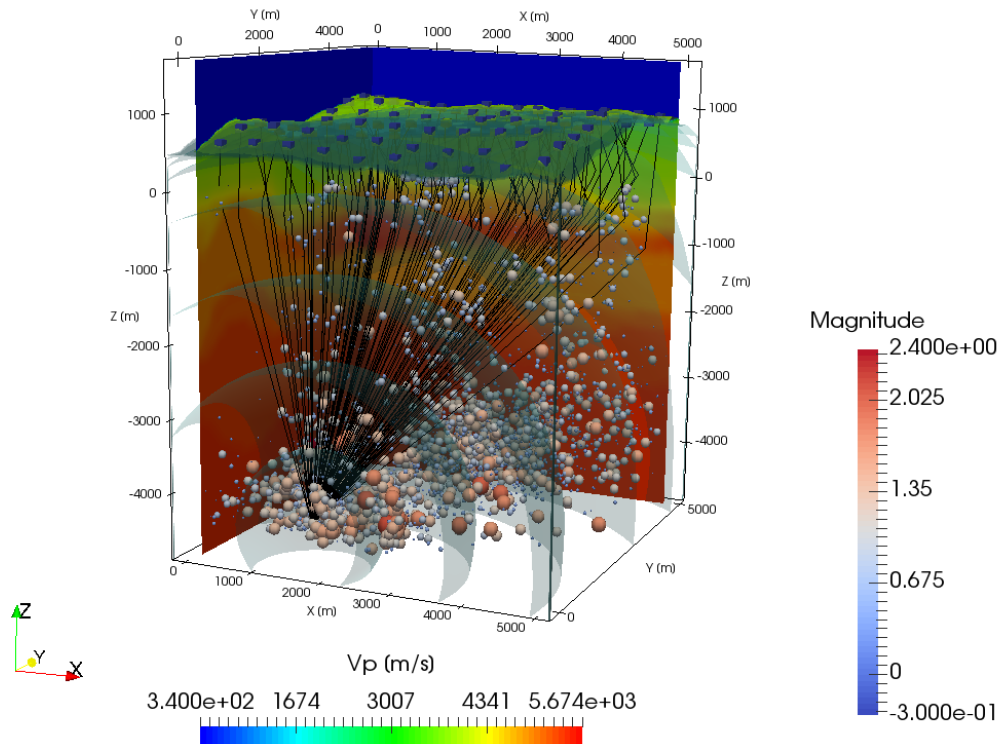


SB4 - Vertical Component



- 4 Gen 2 JB's were co-located with LBNL array stations (SB4, STY, CLV, SQK).
- Comparisons for make for several events.
- Results provide information on local site effects & sensor/system polarity issues.
- Results provide validation that the low-cost JB portable seismic recording systems meet the technical spec's and durability for our 1-year long monitoring campaign.

Dense Array Tomography



- Use data from dense array to improve tomographic image of the seismic velocity. Use improved velocity model:
 1. to obtain higher-accuracy hypocenter locations,
 2. to develop elucidate rock physics models, i.e., where fluid/steam is migrating, where rock properties are changing.