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Quick Look of SPE-5 Far Field Diagnostics

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BLUF: 99% of Traces Look Good

- 372 geophone, broadband, and accelerometer channels in Lines 1-5 were examined (no Yang, Rowe, etc.)
 - SPE4Prime was useful for comparison as it had 98% good channels
- Number of “Bad” Channels: 3
 - L4-19Z, L3-26Z, L4-26Z
- Number of channel-swapped channels: 4
 - L1-14ZR, L2-19ZR
 - Check wiring in field and metadata; check maintenance logs
 - Change metadata and re-wire if confirmed
- Channels with instrumental drift: 2
 - Data is still good, only very low frequencies are affected
 - L2-20 Guralp (no backup)
- Thanks to Bob, Kale, Ryan, Emily, Ken, Gabe, Mark, Dave, etc.

Array Geometry

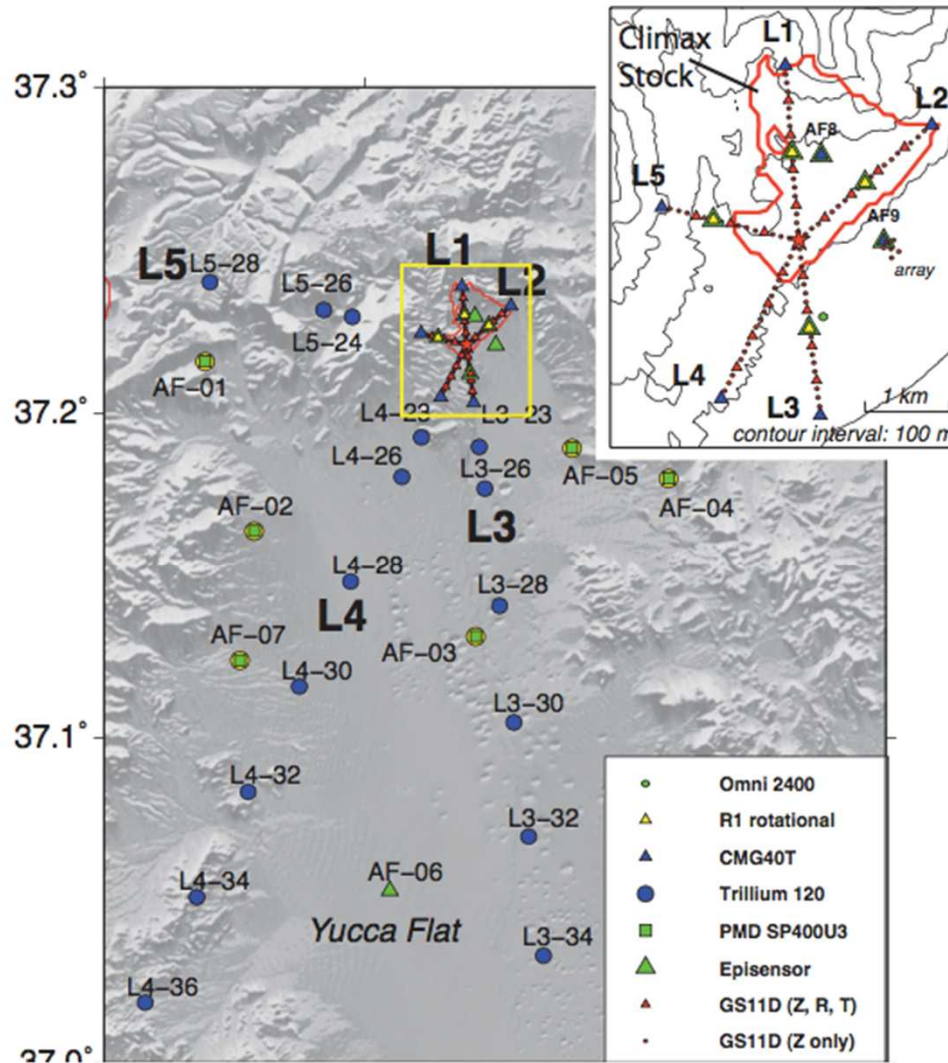
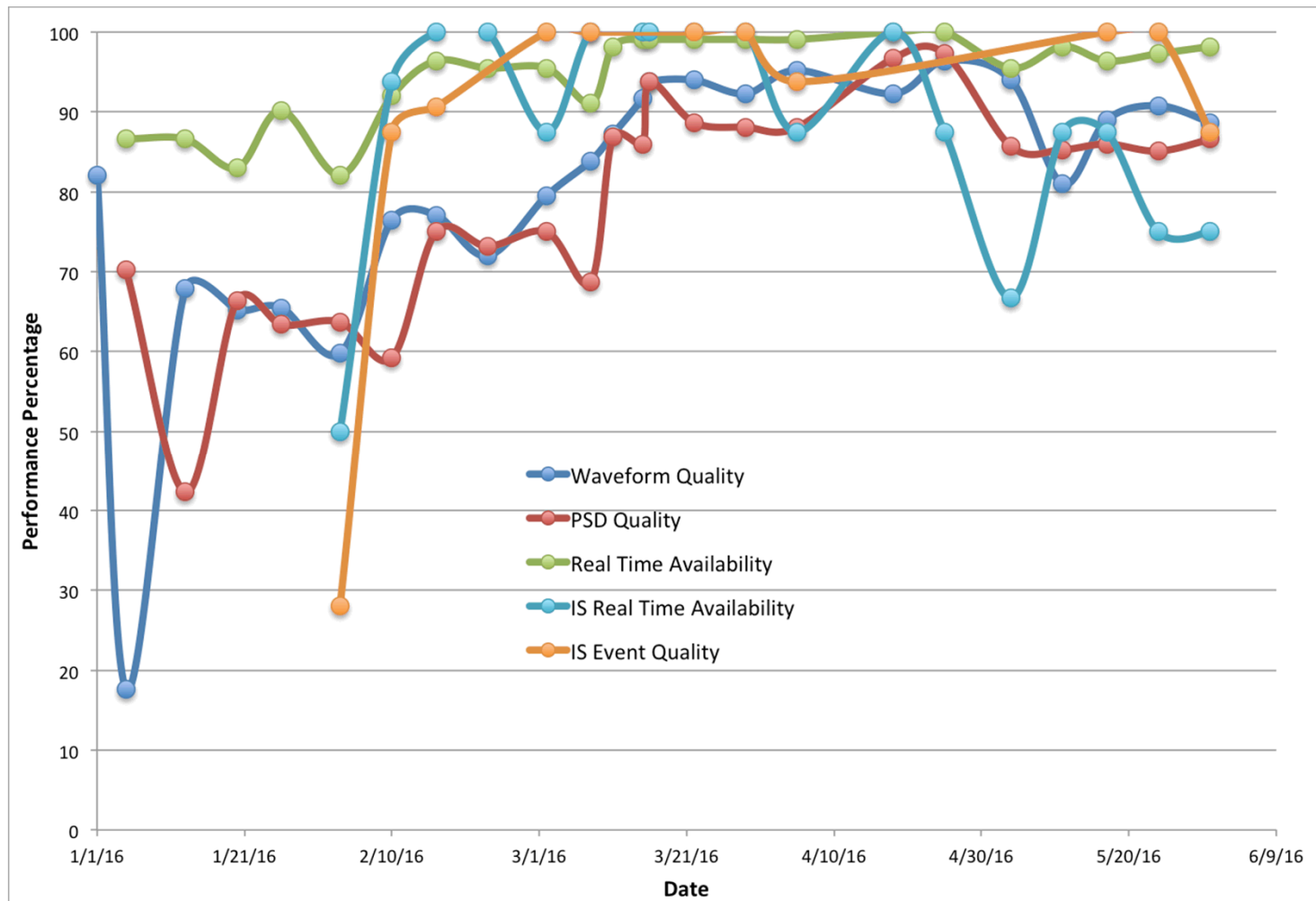
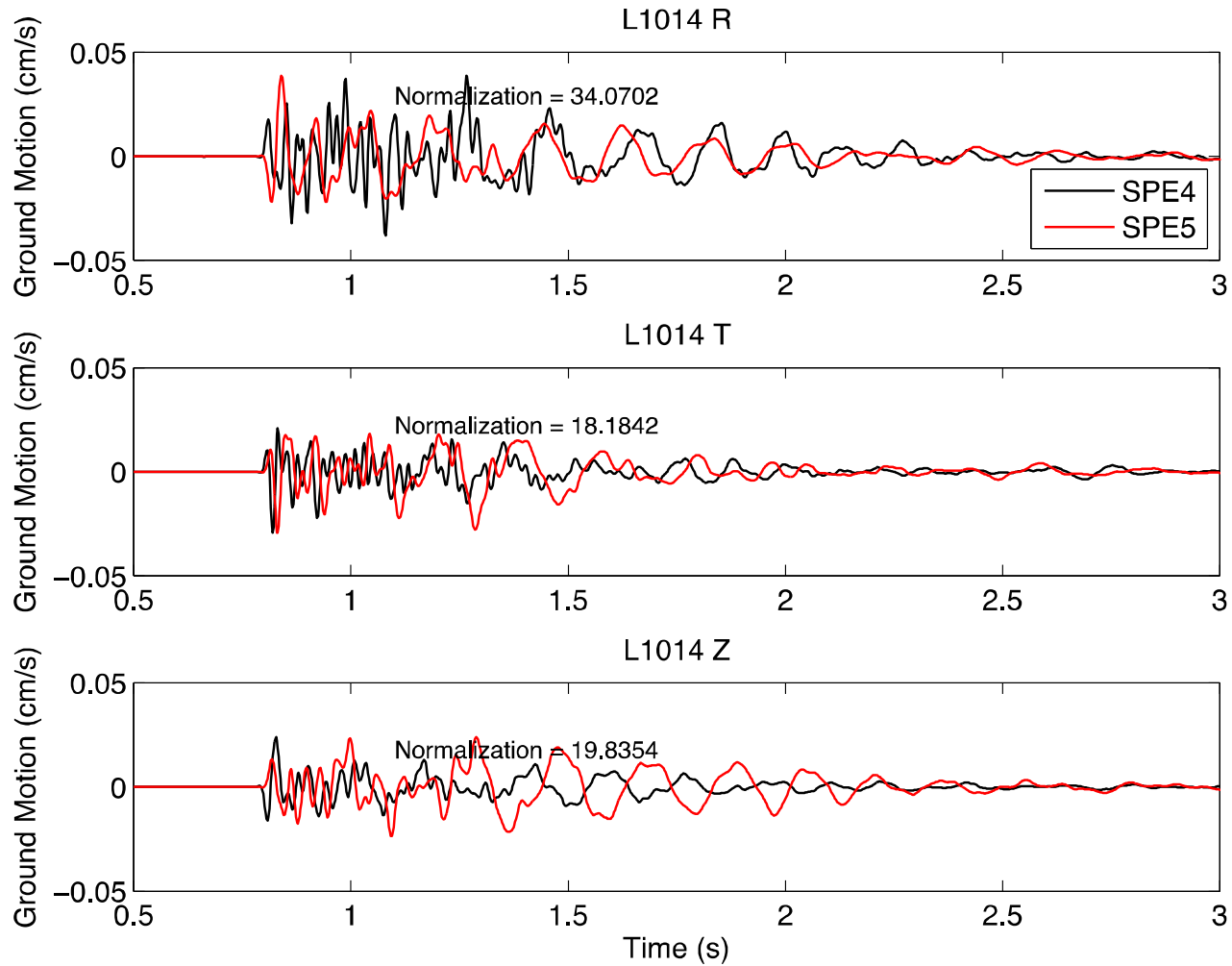


Figure 1. map of sensor deployment for SPE3.

Quality over Time

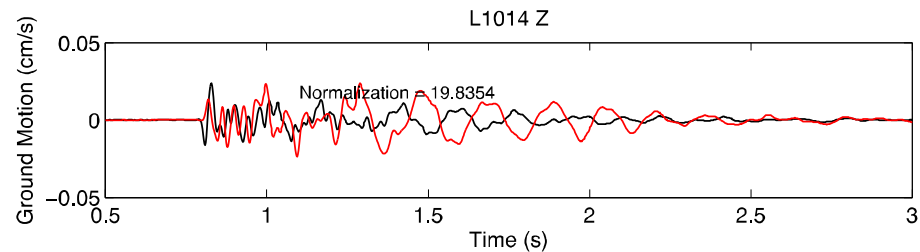
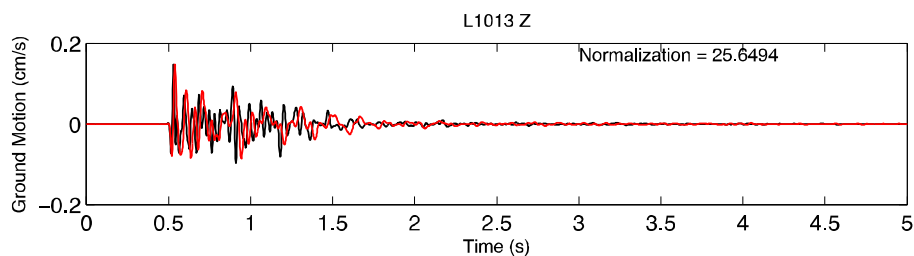
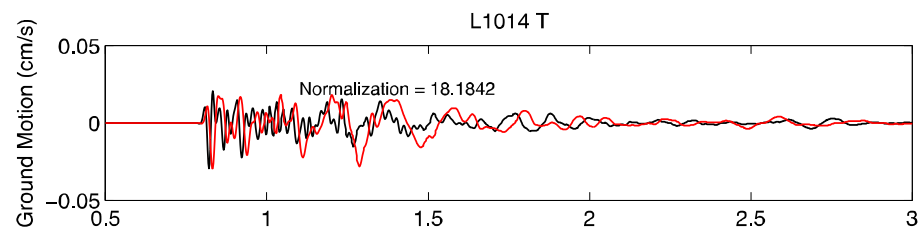
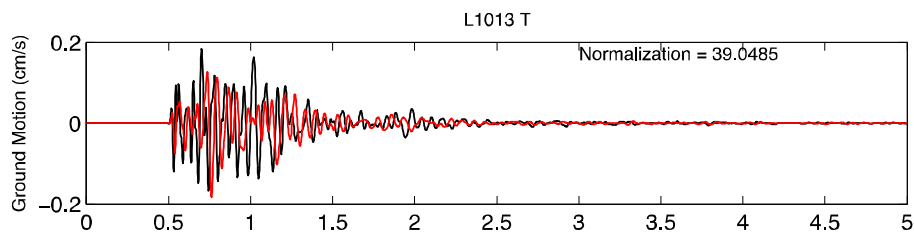
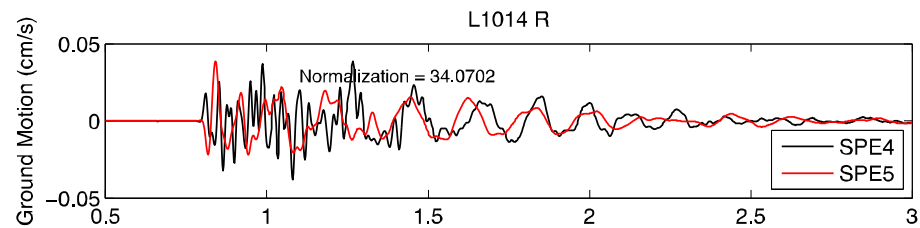
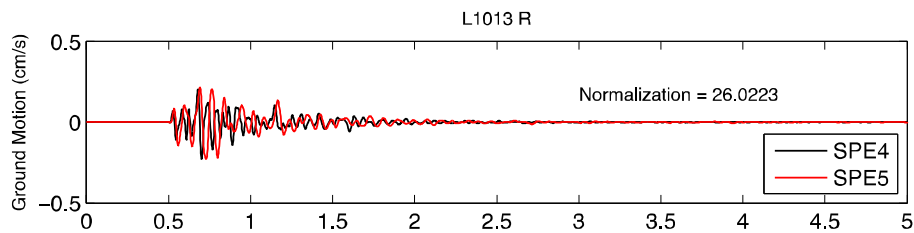


Channel Swap?

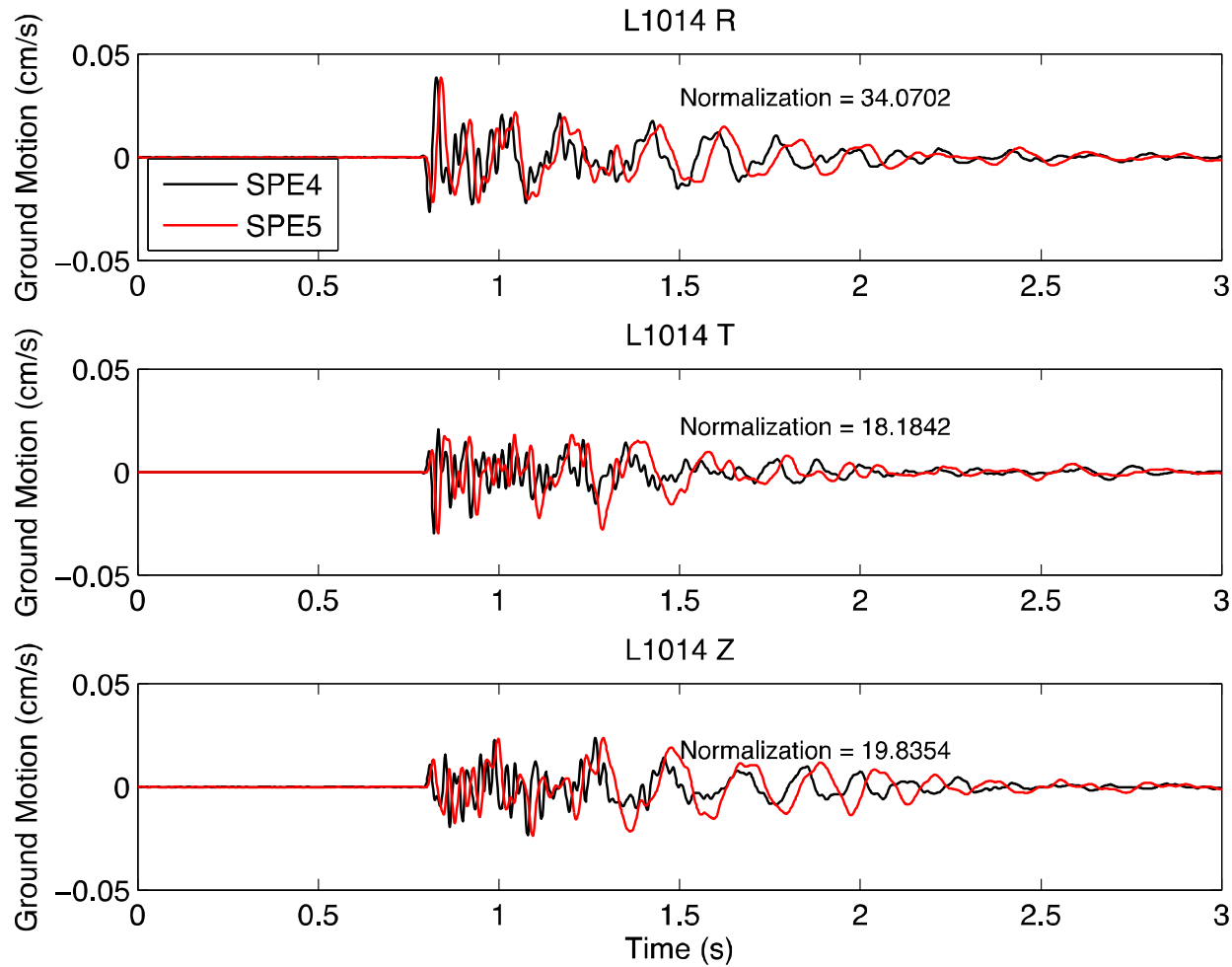


Filtered 1 – 50 Hz

L1-13,14 for comparison

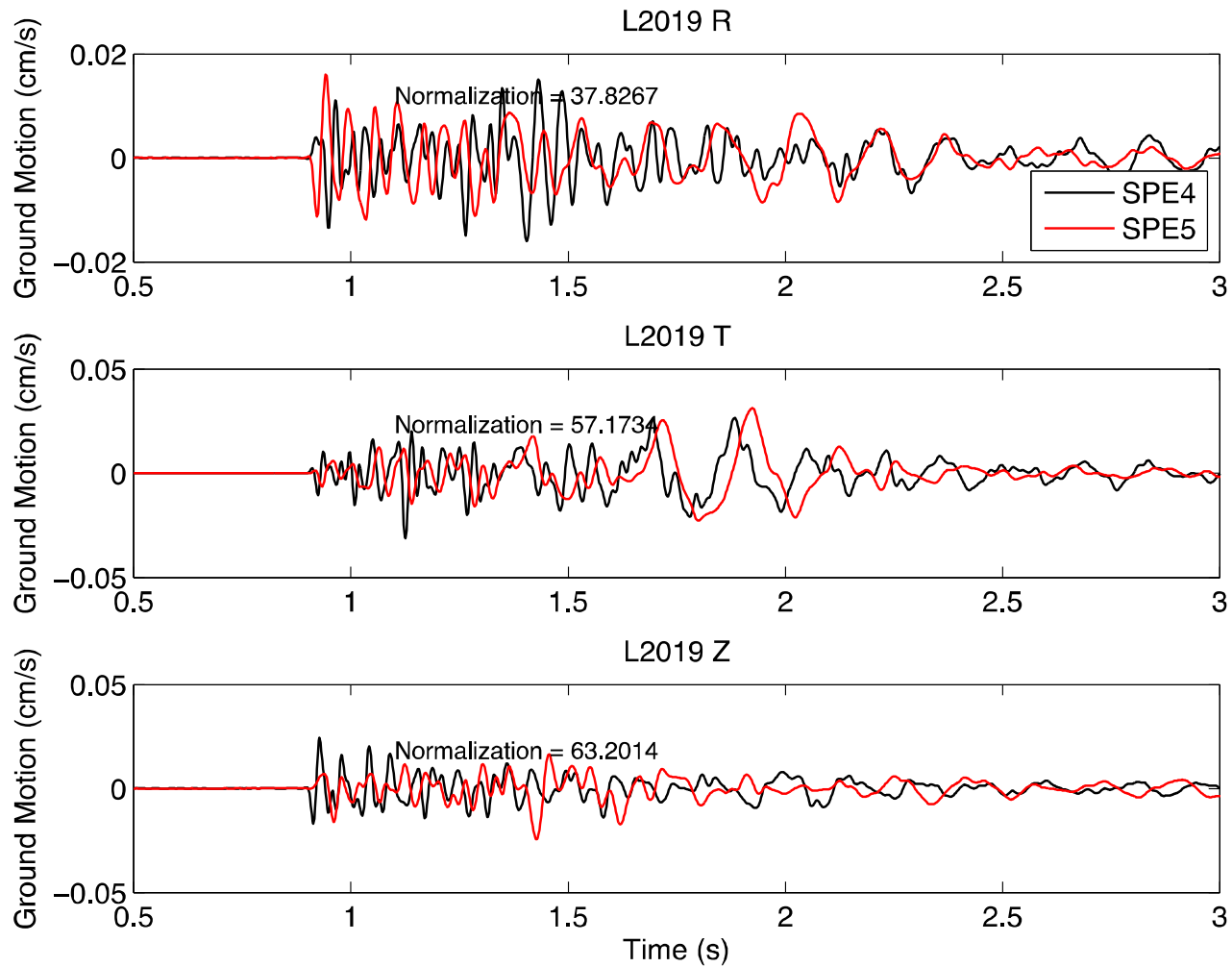


L1-14 Swapped



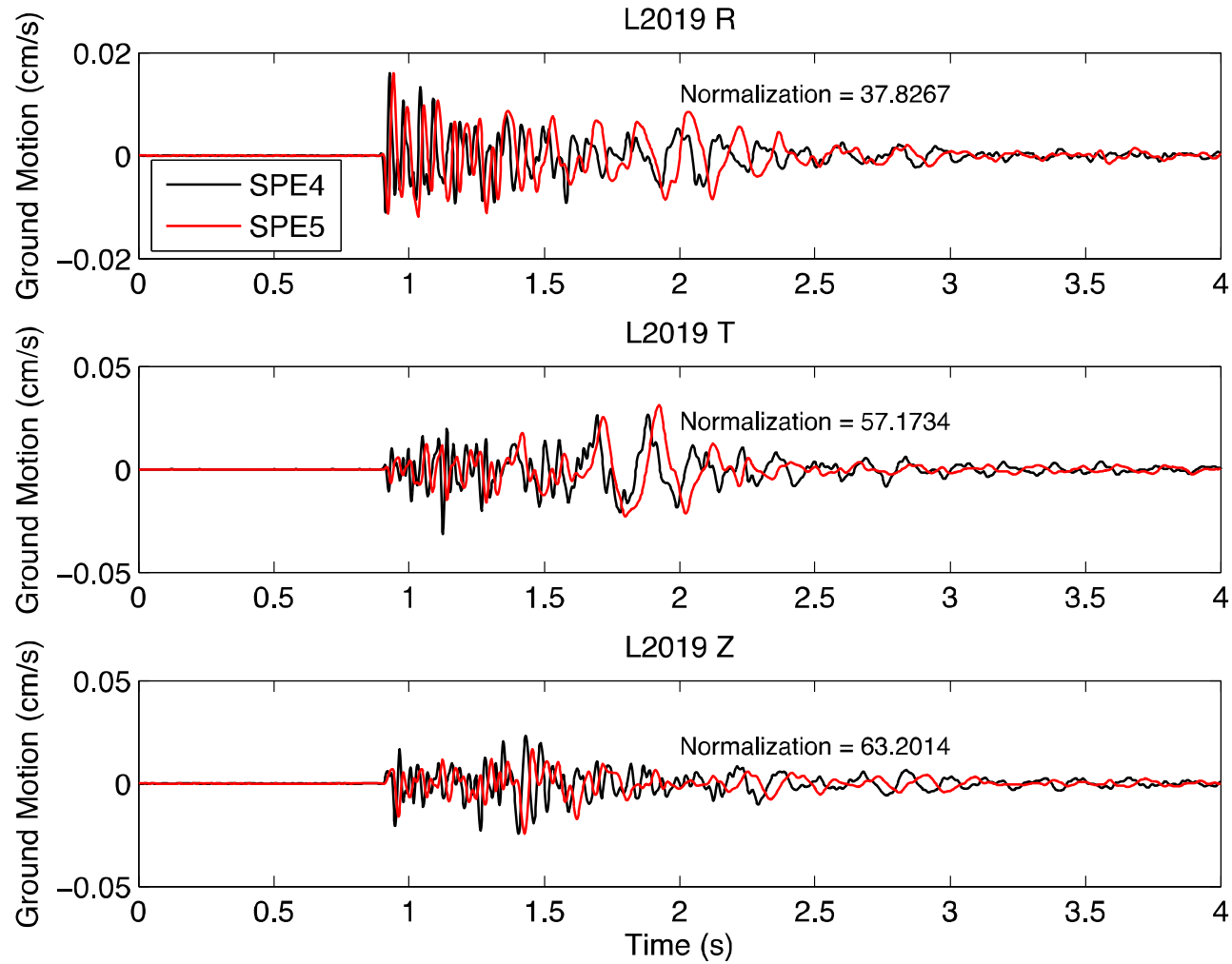
Filtered 1 – 50 Hz

Channel Swap?



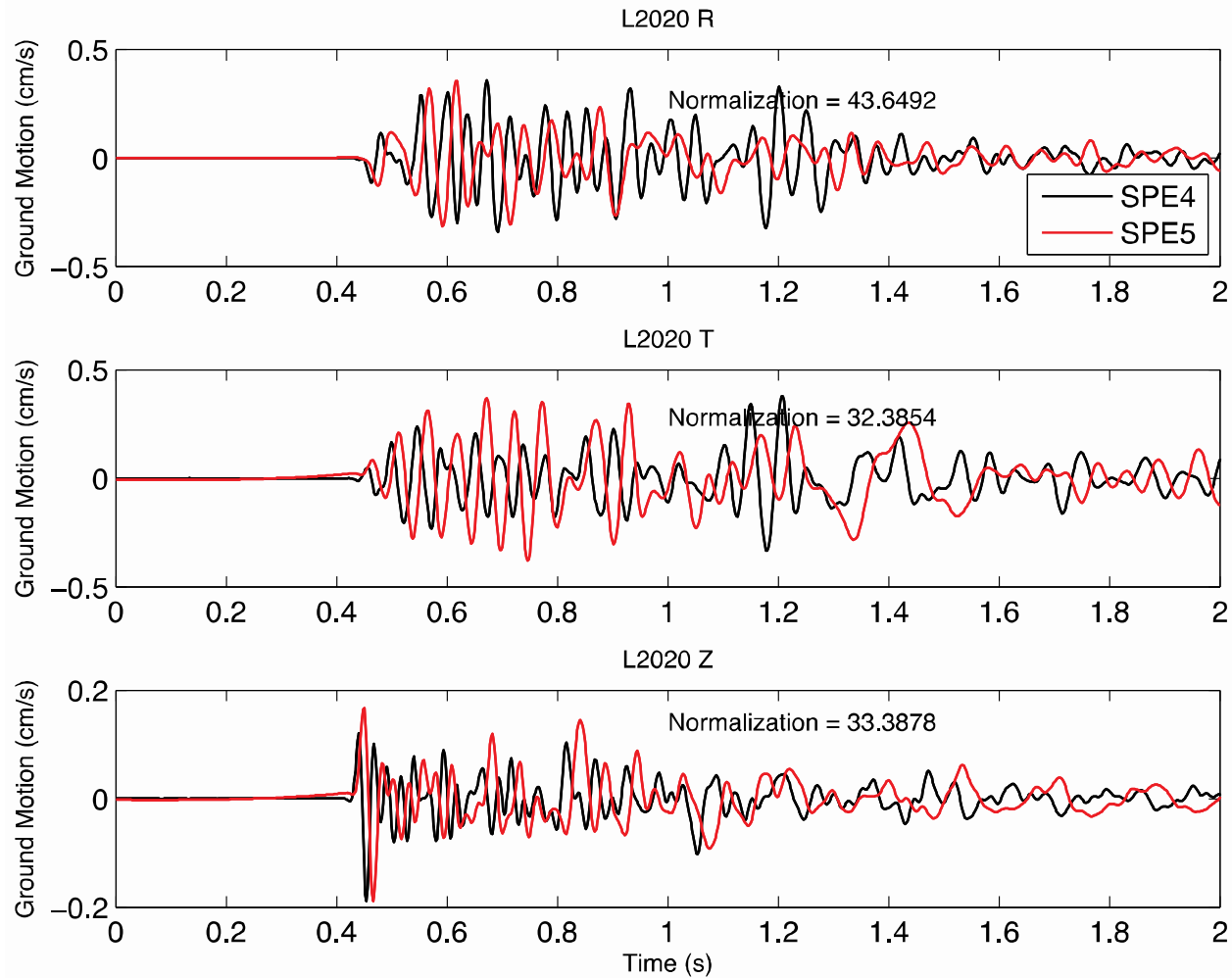
Filtered 1 – 50 Hz

L2-19 Swapped



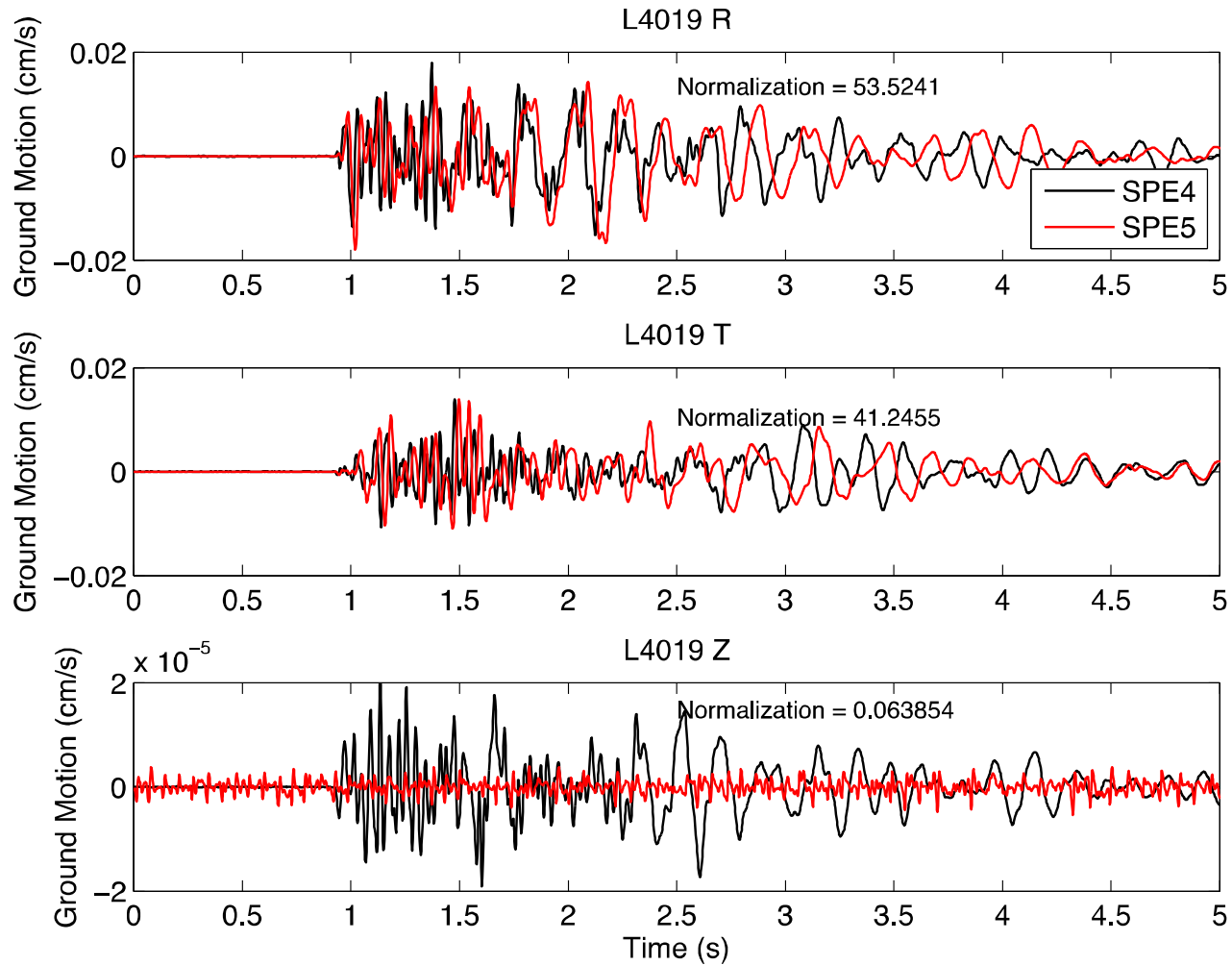
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Instrumental Drift



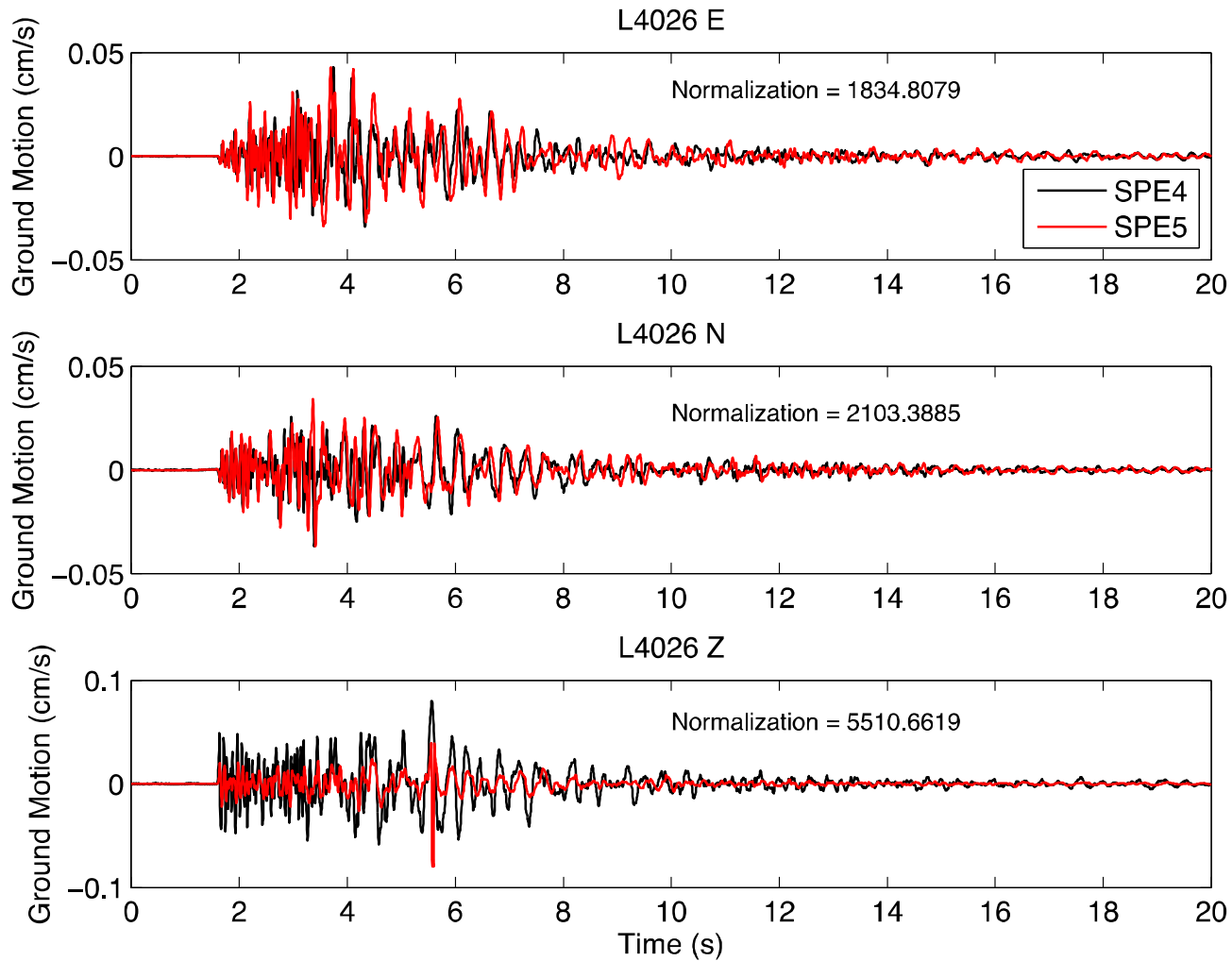
Filtered 1 – 50 Hz

Bad Channels



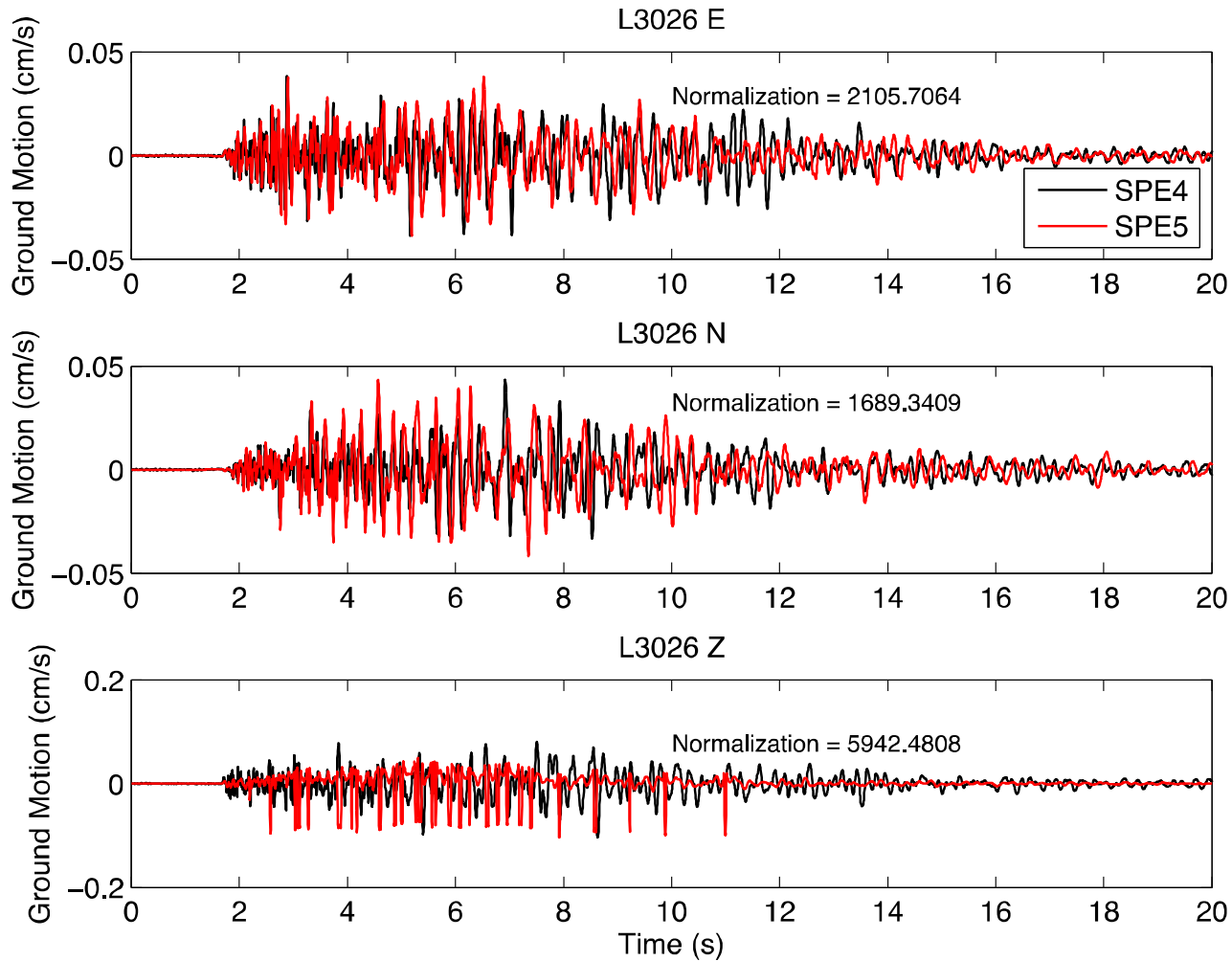
Filtered 1 – 50 Hz

Bad Channels



Filtered 1 – 50 Hz

Bad Channels



Filtered 1 – 50 Hz