



Waveform QC

T. Taira, C. Valen, S. Boyd

Equipment Testing at Byerly Vault

- Sensors, data logger, GPS antenna, cables are tested to ensure they work appropriately

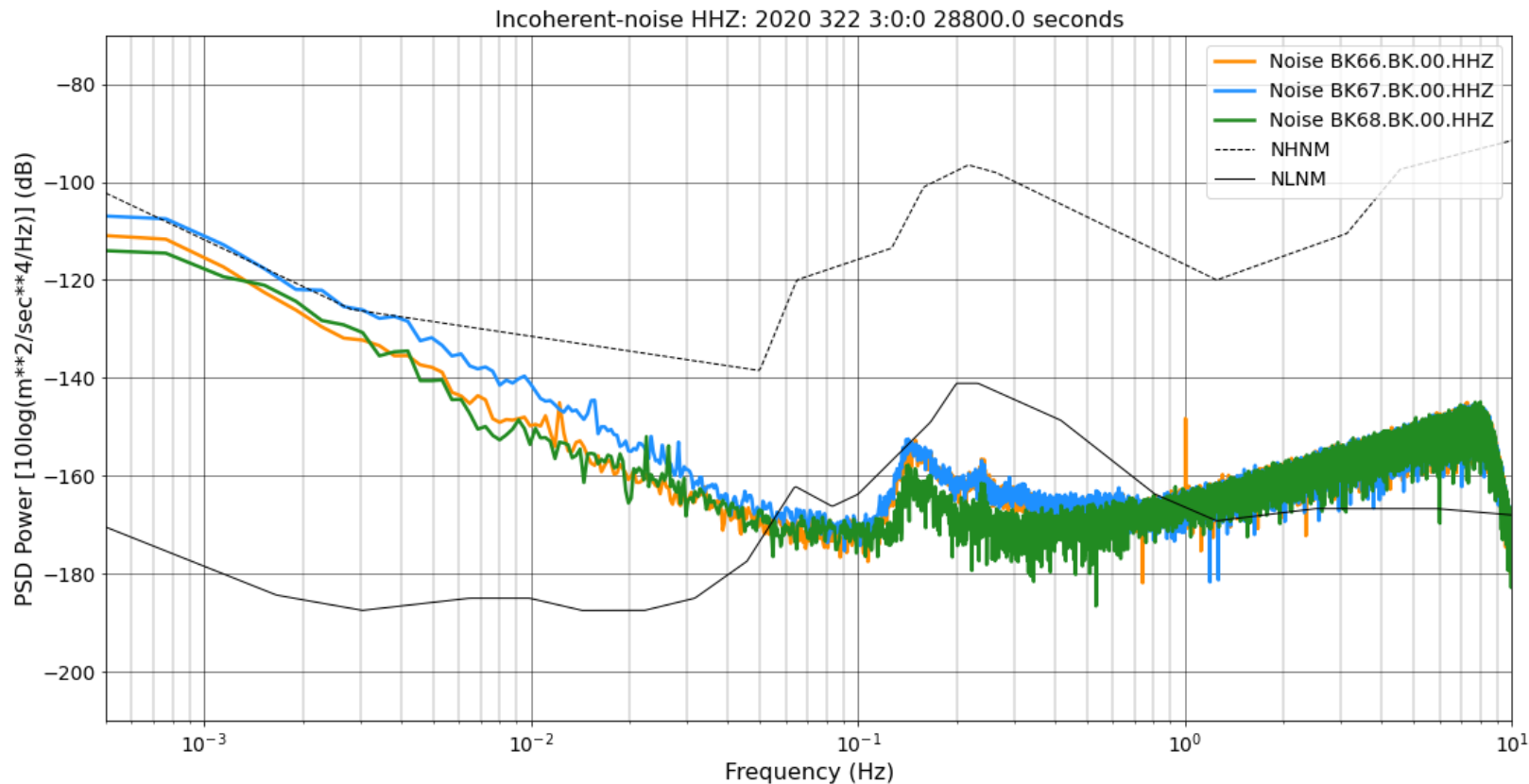


Equipment Testing at Byerly Vault

- Seismic sensor
 1. Ambient noise PSDs
 - Sleeman's method for incoherent-noise estimate
 2. Response to EQs
 - Local and teleseismic EQs
 3. Accelerometer: flip test
- Data logger
 4. Noise PSDs w/wo terminator

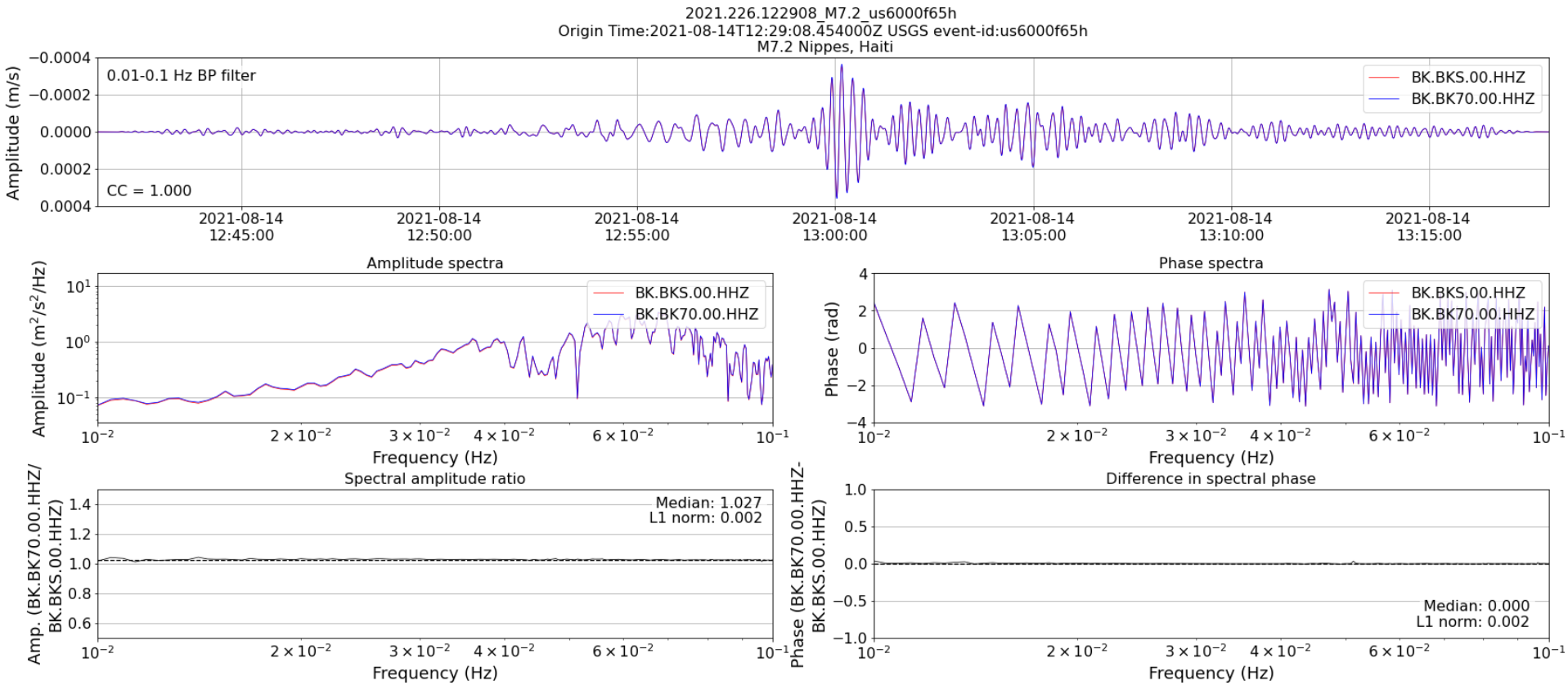
Incoherent noise (self-noise) estimate

- Python script: Sleeman's method. original code from A. Ringler (USGS)
- Example: three MBB-2s comparison



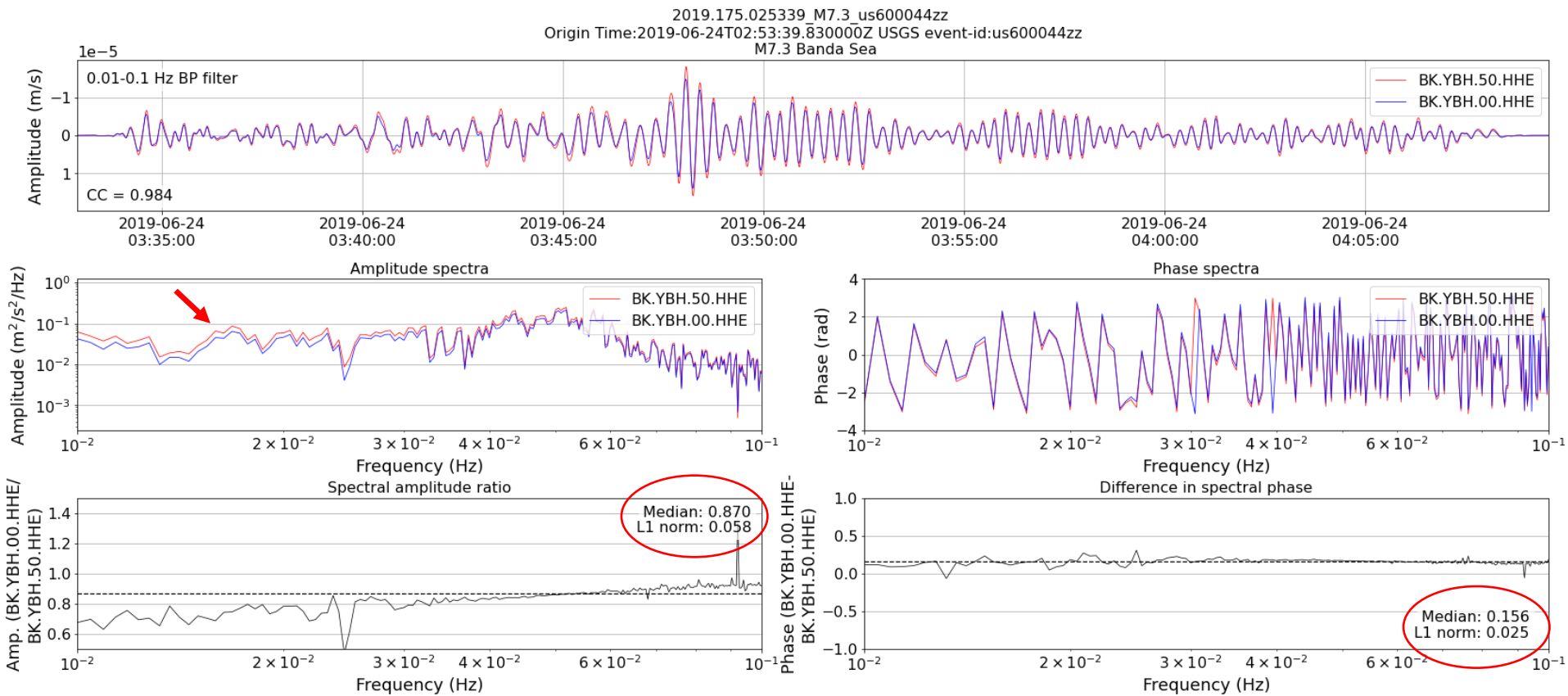
Waveform comparison

- Python script: ObsPy, NumPy
- Example: **STS-1 (BKS)** vs **STS-7 (BK70)** comparison



Identifying equipment issue

- Example: **STS-2.5 (YBH.50)** vs **STS-1 (YBH.00)** comparison



WaveformQC python scripts

- Github: <https://github.com/takaakitaira/WQC>