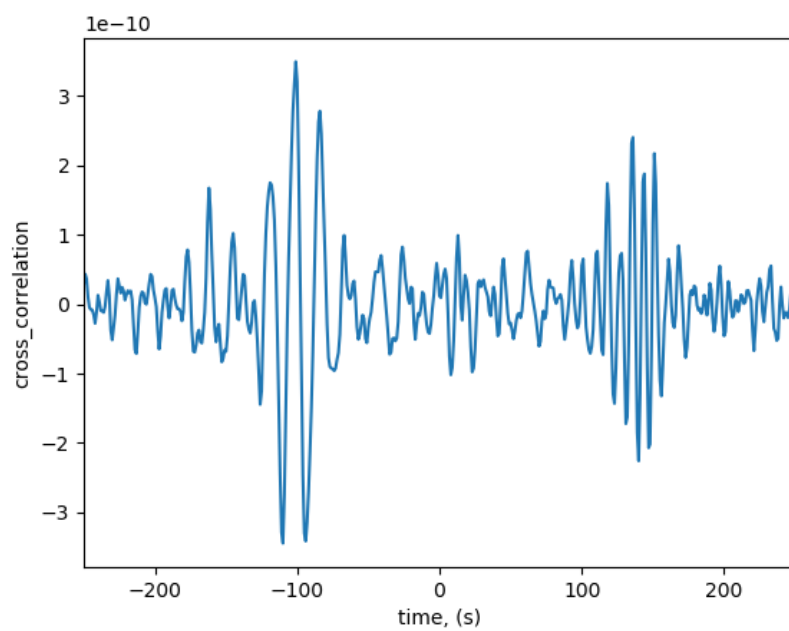


PHY408: Time Series Analysis
Lab 4

April 4, 2018

Saila Shama

Figure 1: Cross correlation of PHL and MLAC data



Part 1

1.1

Refer to Figure 1

1.2

Refer to Figure 2. The bit conversion did not preserve the phase information of the true cross-correlation.

Figure 2: Cross correlation of PHL and MLAC data after bit-conversion

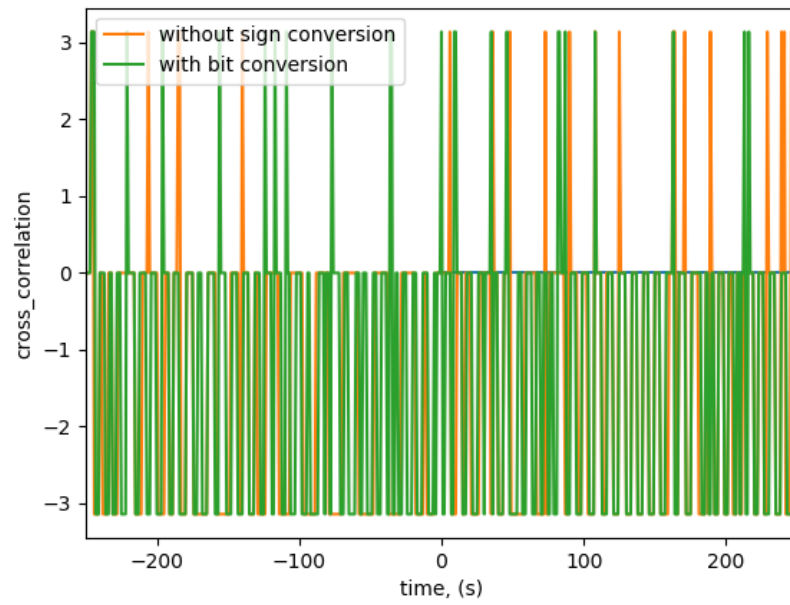
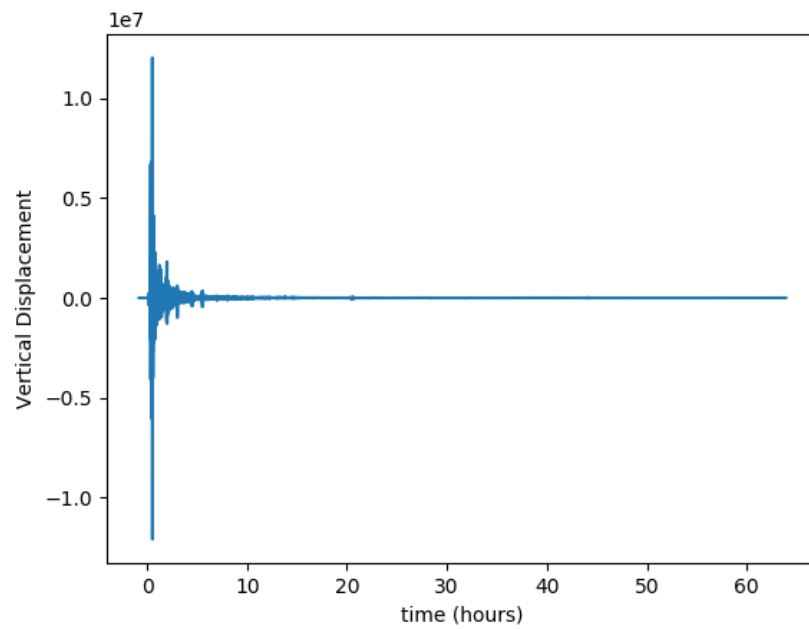


Figure 3: Plot of raw seismic data



Part 2

2.1

Refer to Figure 3

2.2

Refer to Figure 4

2.3

Refer to Figure 5

2.4

Refer to Figure 6

2.5

Refer to Figure 7

Figure 4: Power spectrum of raw data without windowing

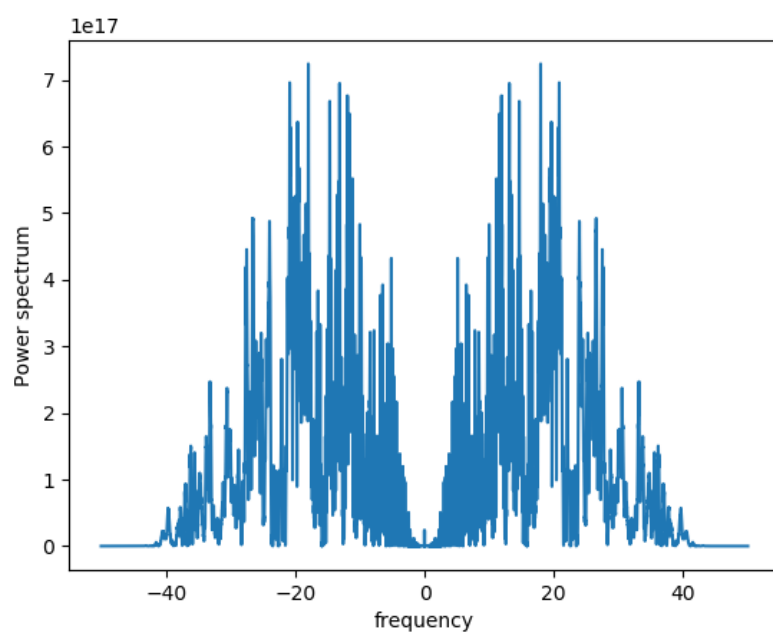


Figure 5: Power spectrum of raw data after detrending and applying hanning window

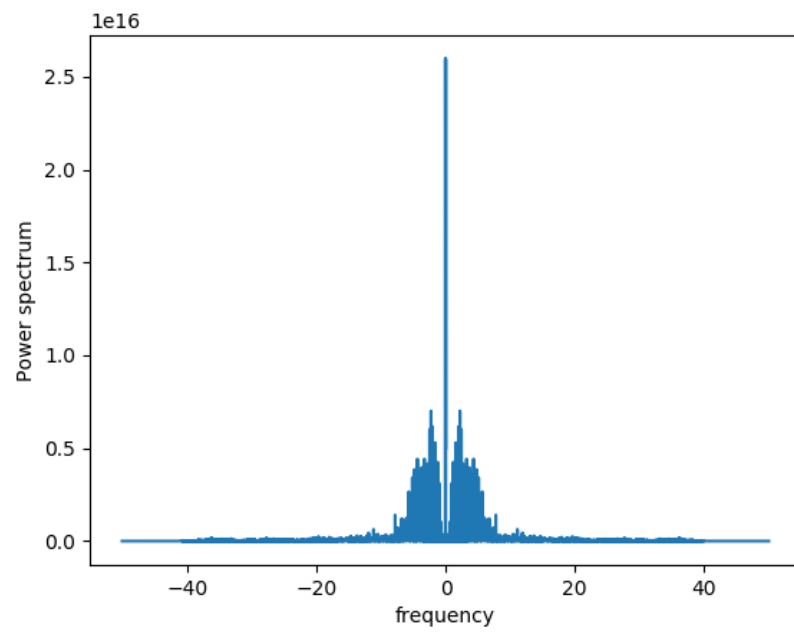


Figure 6: Plots in Figures 4 and 5 overlaid and zoomed in

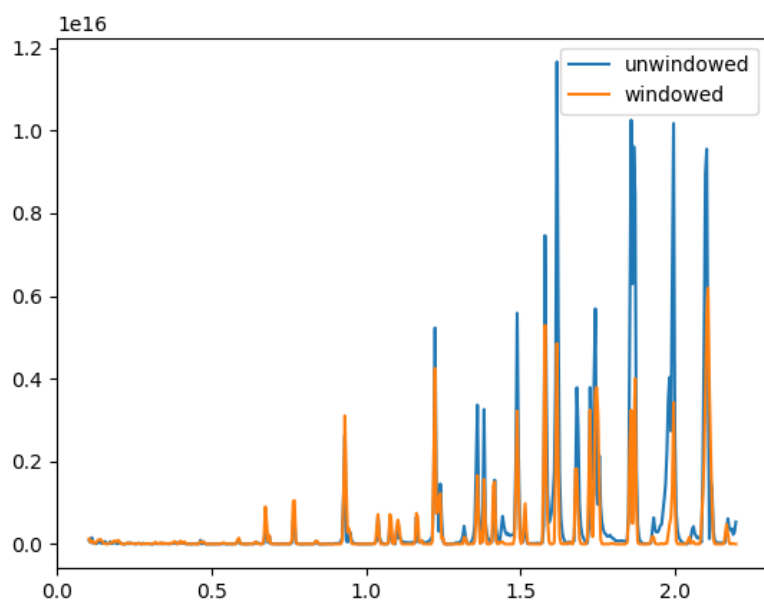


Figure 7: Identification of normal modes from power spectra of seismic data

