

Assignment 3

An experiment was performed and data collected using UCLA NEES equipment (Episensors, Q330's, Antelope Software, and linear mass shaker). The scale structure was attached to the mass of the linear shaker and underwent the Loma Prieta ground motion while accelerometers attached to each floor recorded story accelerations. Plot the acceleration data in a similar fashion to assignments 1&2. Plot the FFT of each channel of acceleration data. Comment of what predictions about system identification can be drawn from the FFT plots. Identify the modal properties using an ARX model and compare to the results from assignment 1 and 2.