IN THE NAME OF ALLAH

CABLE FOOT SUSPENSION BRIDGE

PRESENTED BY SALAR DELAVAR GHASHGHAEI (QASHQAI)

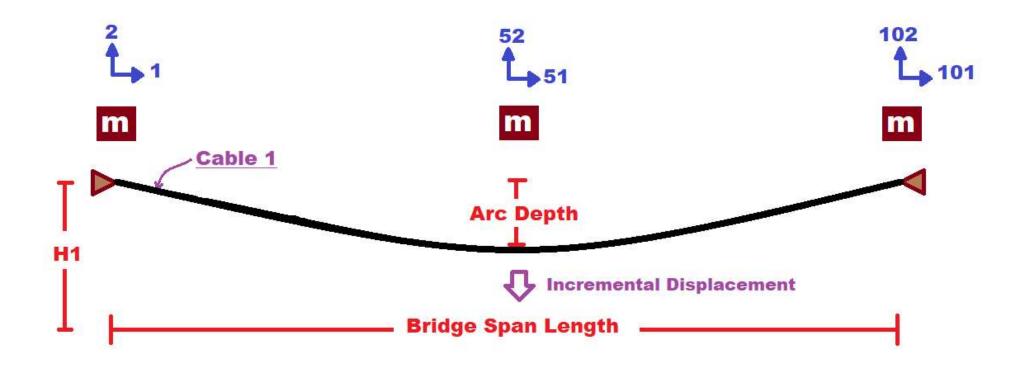
Special thanks to Mr. Tanweer Malik for his constructive comments and for providing high-quality images.

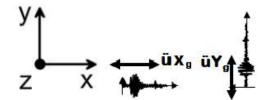






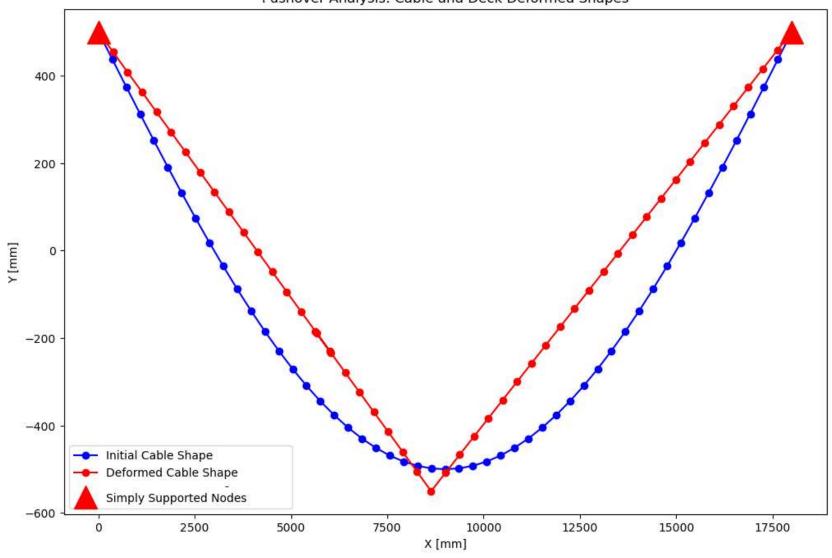


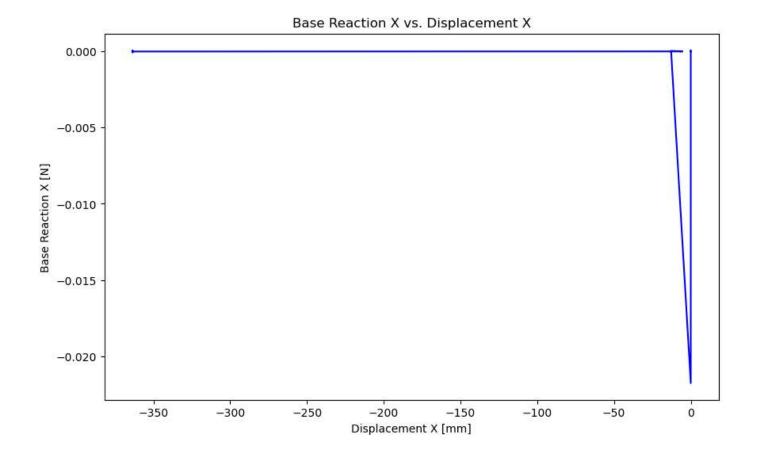


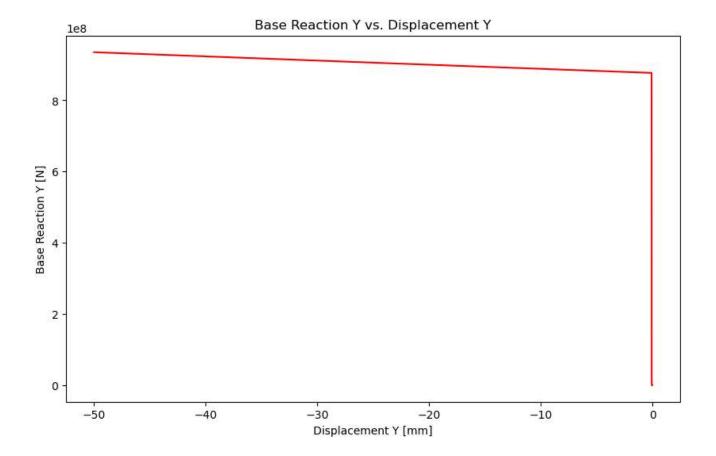


PUSHOVER ANALYSIS

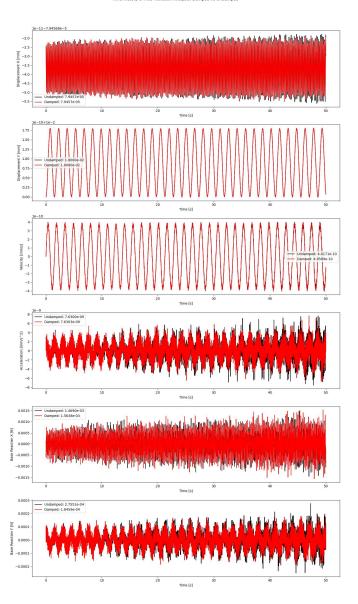
Pushover Analysis: Cable and Deck Deformed Shapes

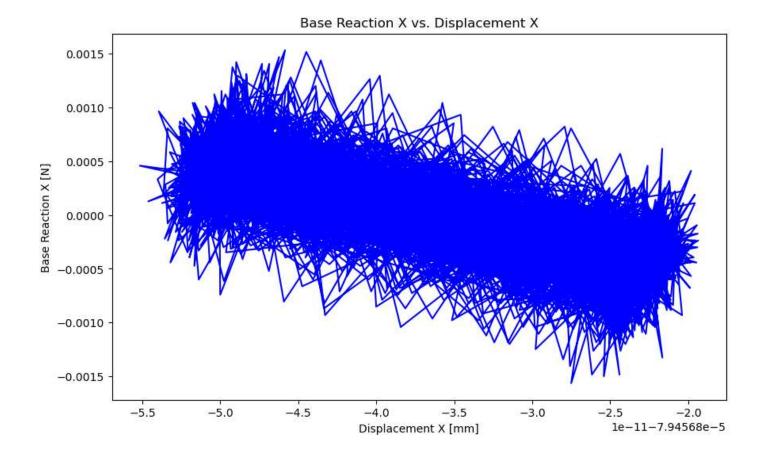


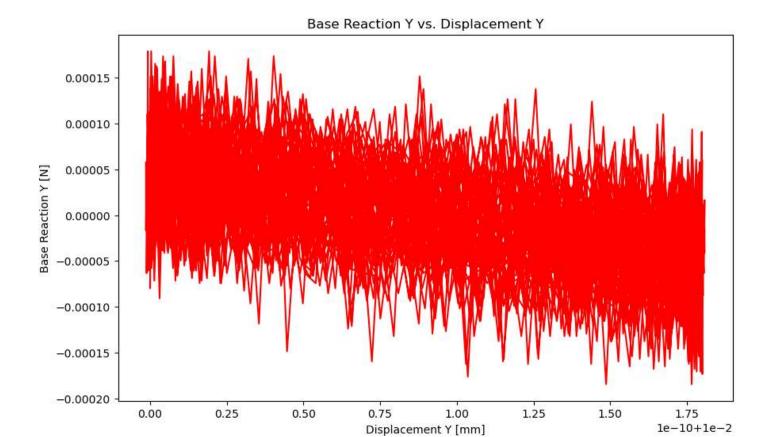


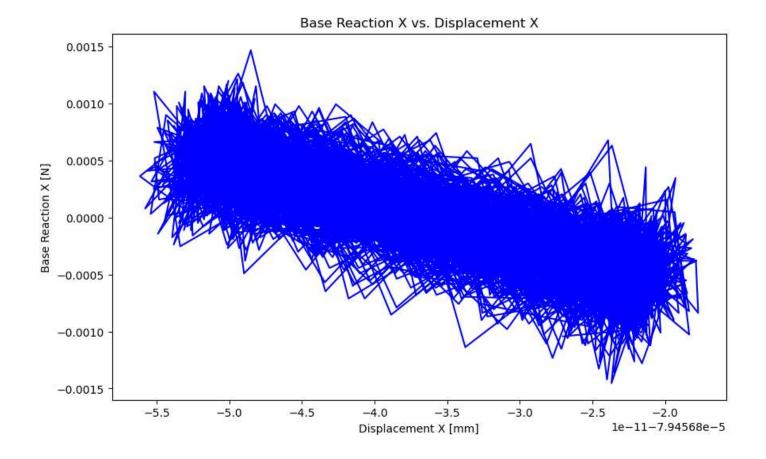


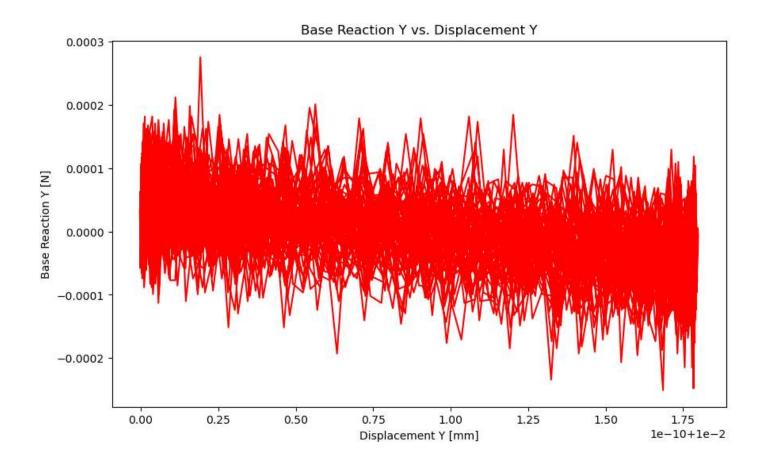
FREE-VIBRATION ANALYSIS

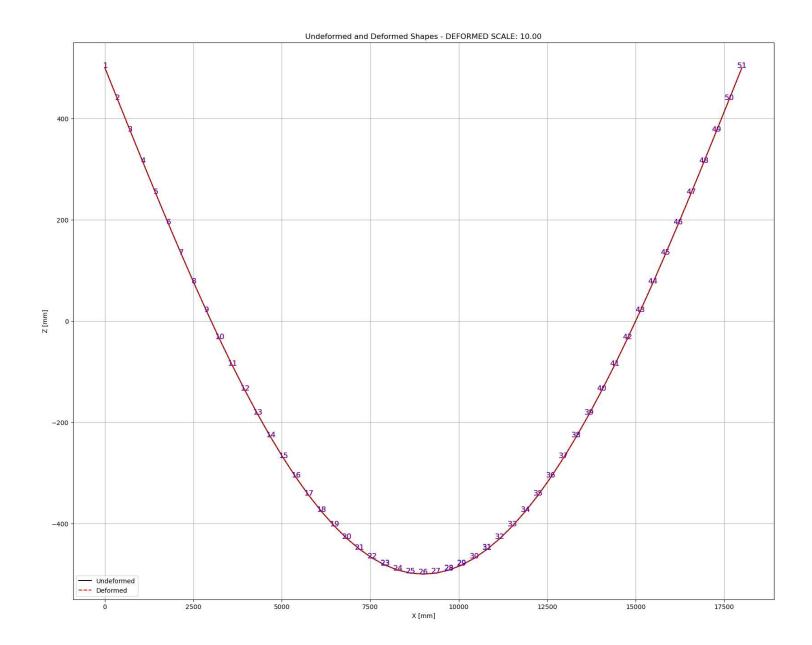


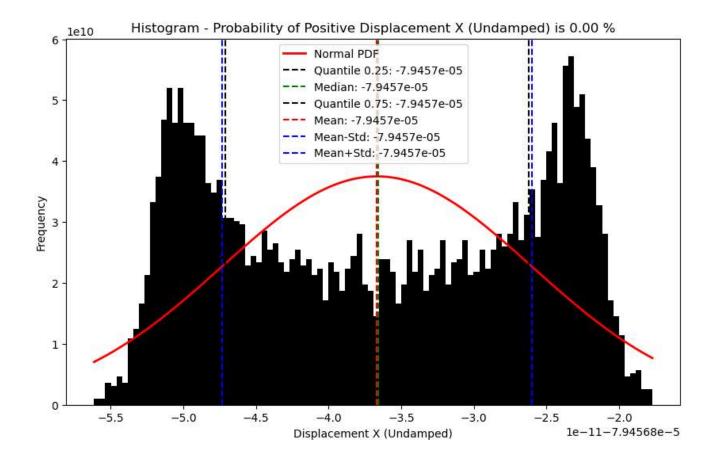


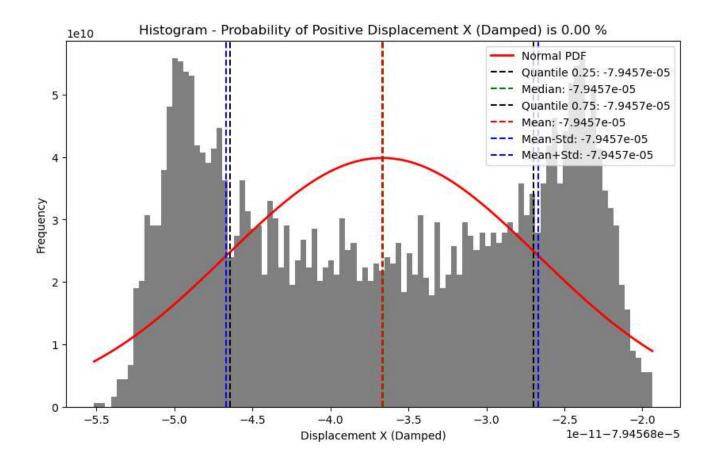


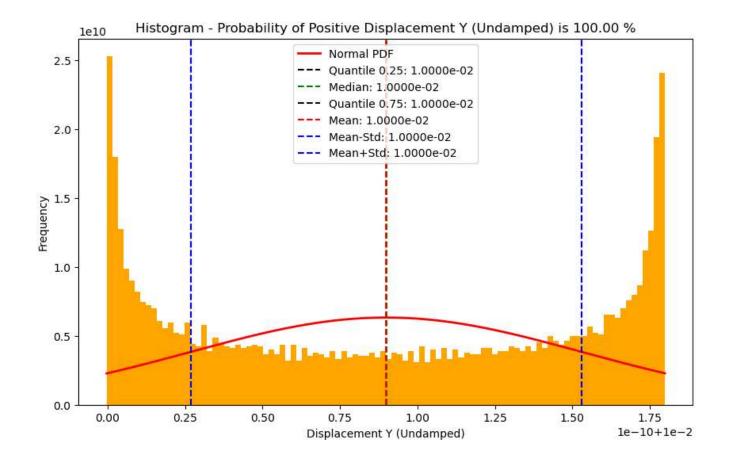


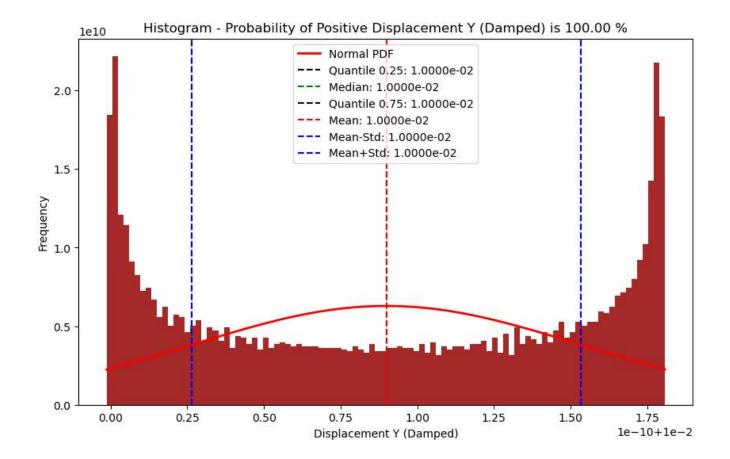


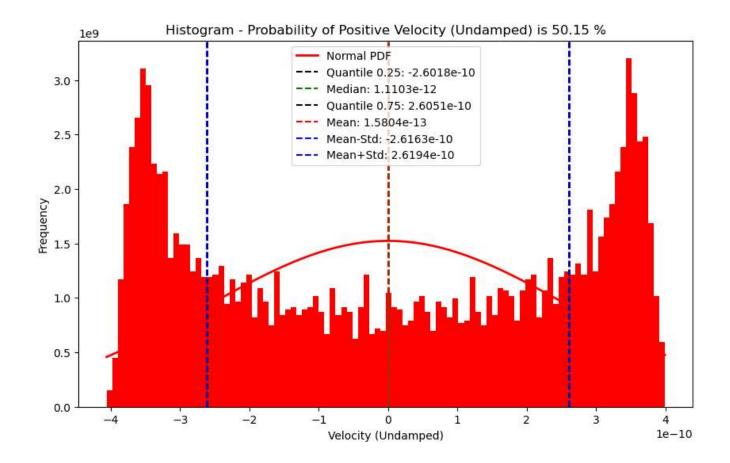


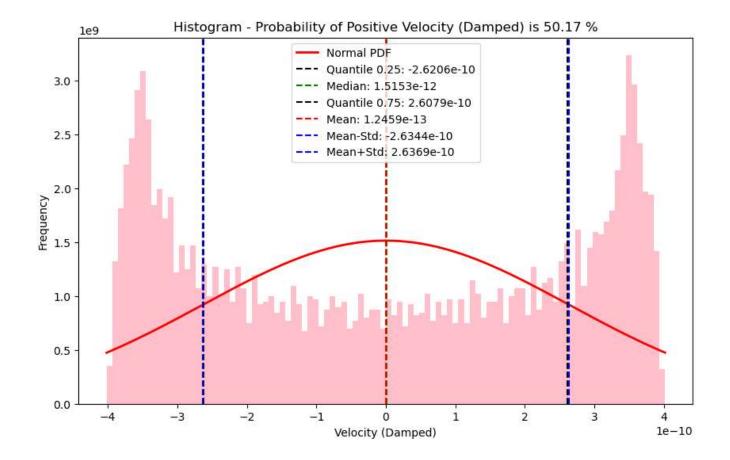


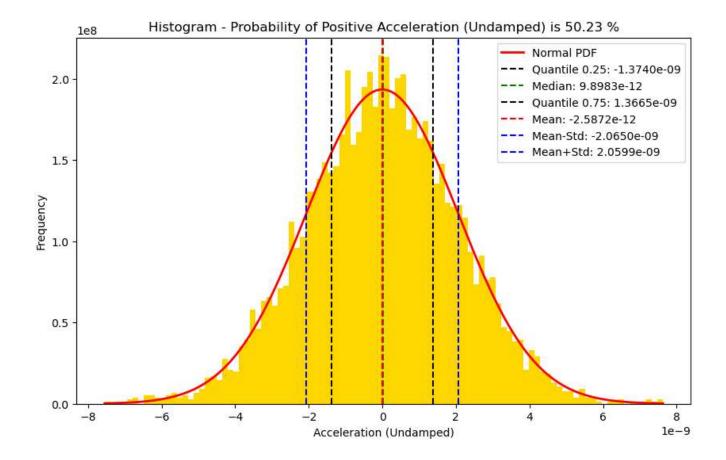


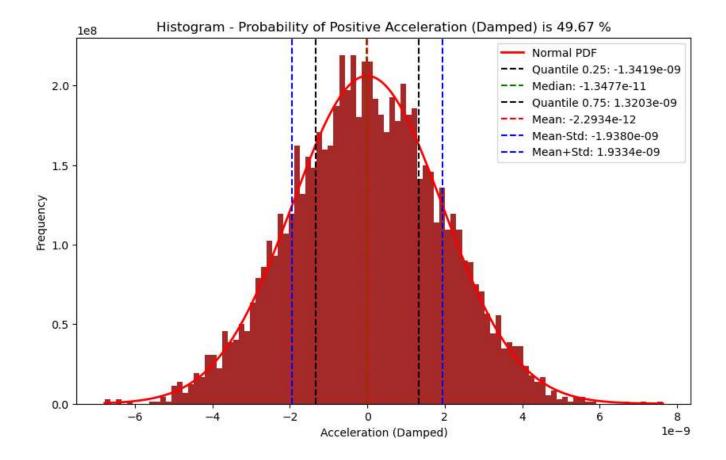




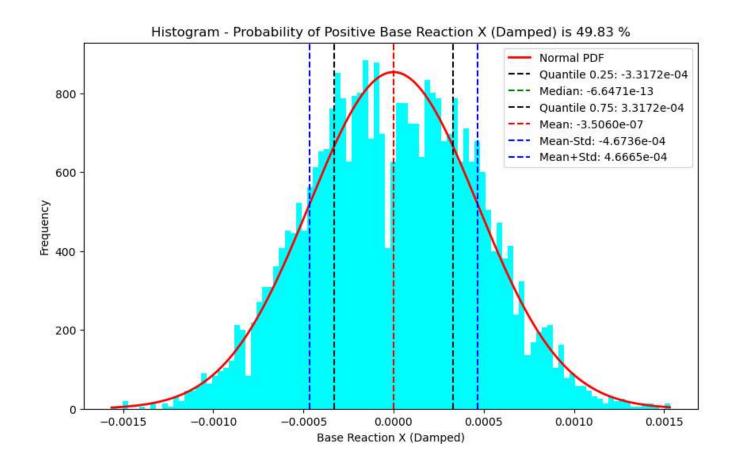








Histogram - Probability of Positive Base Reaction X (Undamped) is 50.47 % Normal PDF Quantile 0.25: -3.4752e-04 Median: 1.3294e-12 800 Quantile 0.75: 3.4752e-04 --- Mean: -4.0746e-07 --- Mean-Std: -4.6166e-04 --- Mean+Std: 4.6084e-04 600 Frequency 6 6 200 -0.0005 0.0005 -0.0010 0.0000 -0.00150.0010 0.0015 Base Reaction X (Undamped)

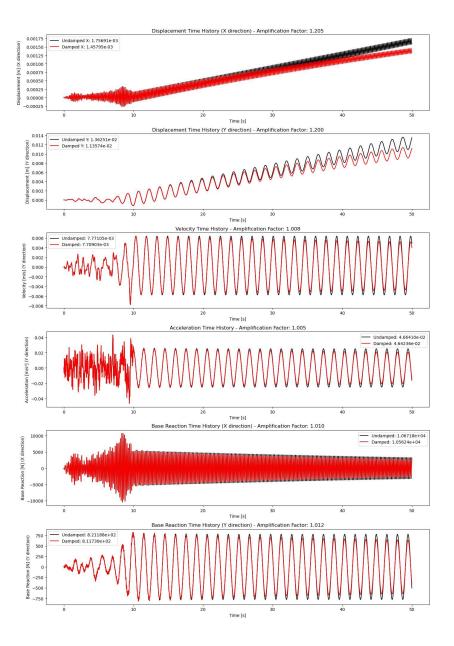


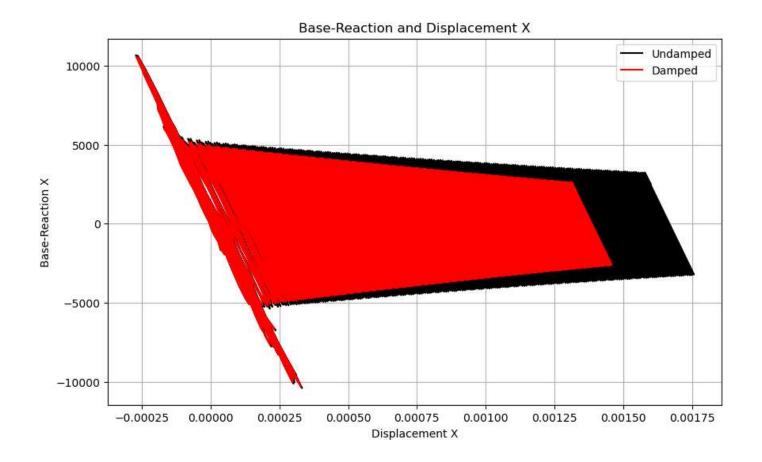
Normal PDF Quantile 0.25: -4.1327e-05 7000 -Median: -3.8110e-12 Quantile 0.75: 4.1327e-05 Mean: -8.9800e-08 6000 Mean-Std: -6.3882e-05 --- Mean+Std: 6.3702e-05 5000 -Frequency 00 00 3000 2000 1000 -0.0001 0.0001 -0.0002 0.0000 0.0002 0.0003 Base Reaction Y (Undamped)

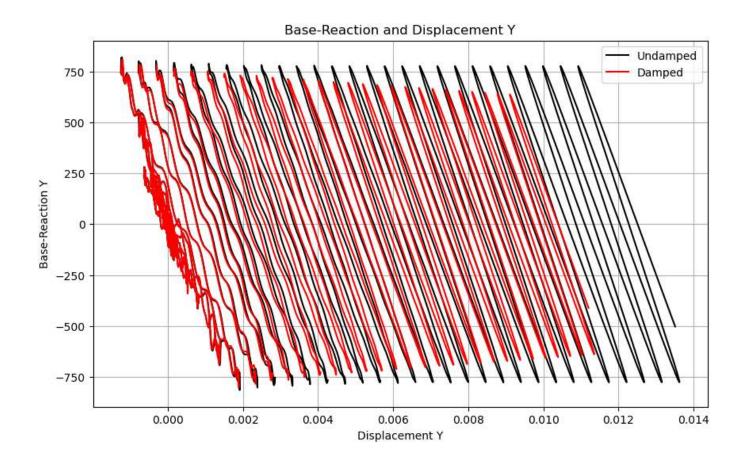
Histogram - Probability of Positive Base Reaction Y (Undamped) is 49.85 %

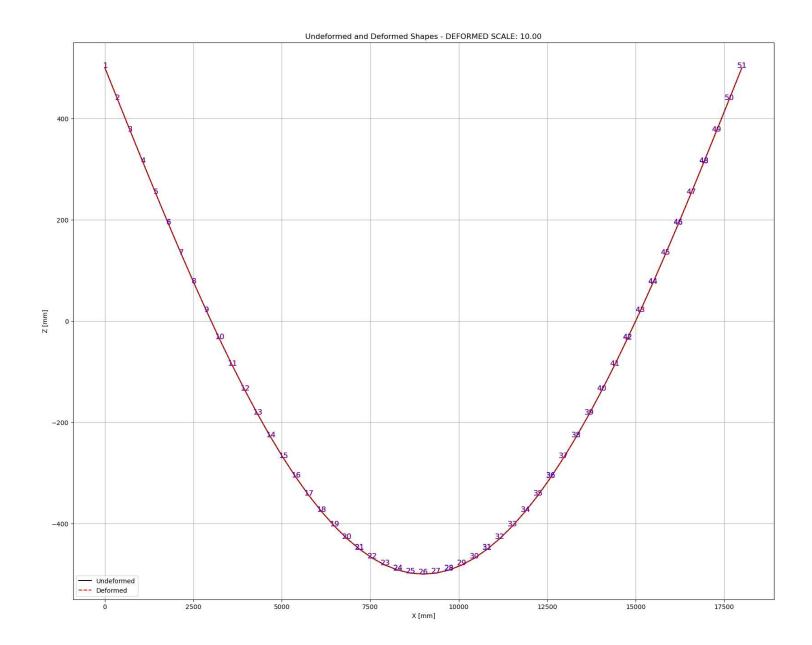
Histogram - Probability of Positive Base Reaction Y (Damped) is 49.77 % Normal PDF Quantile 0.25: -4.1327e-05 10000 Median: -3.8110e-12 Quantile 0.75: 4.1327e-05 Mean: -1.0523e-07 Mean-Std: -6.0019e-05 8000 --- Mean+Std: 5.9808e-05 Frequency 6000 4000 2000 -0.00005 0.00000 0.00005 -0.00020 -0.00015-0.000100.00010 0.00015 Base Reaction Y (Damped)

DYNAMIC ANALYSIS

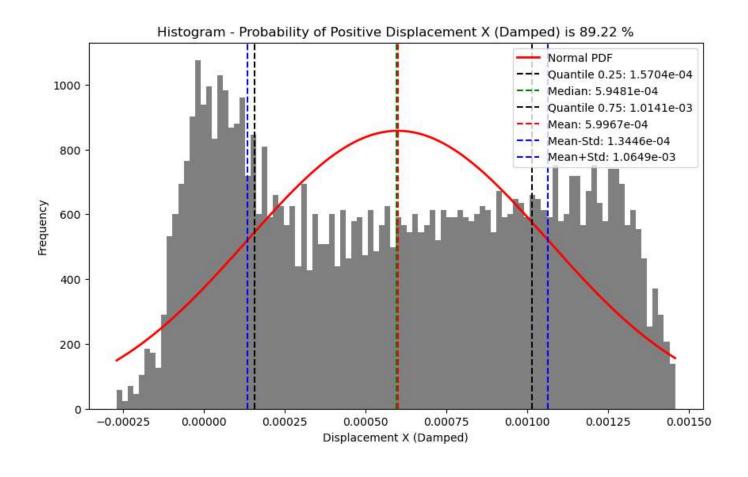


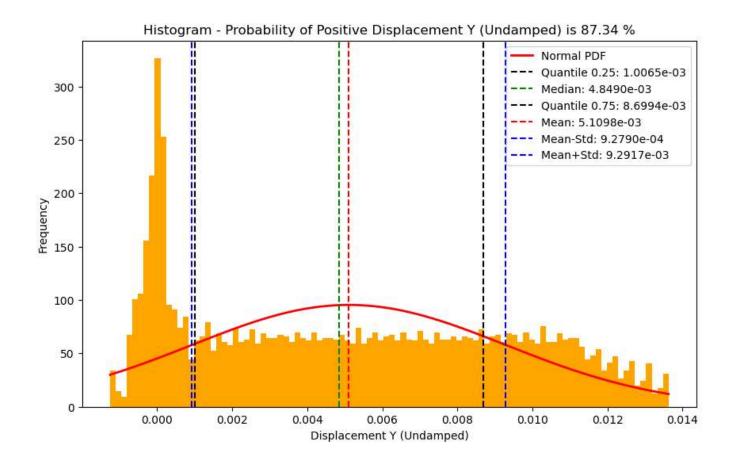


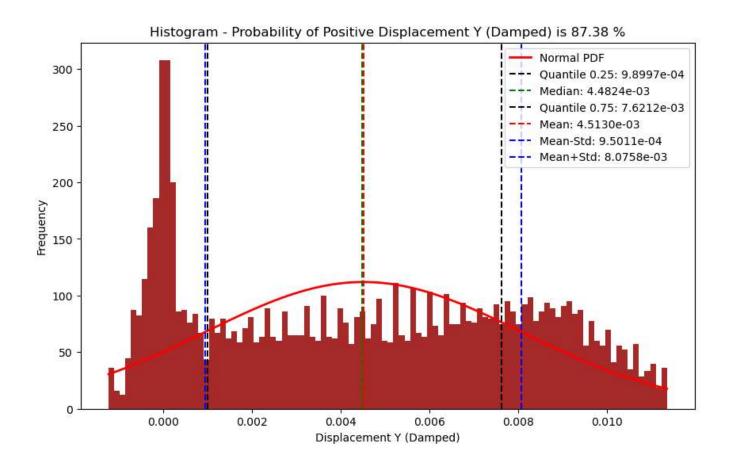




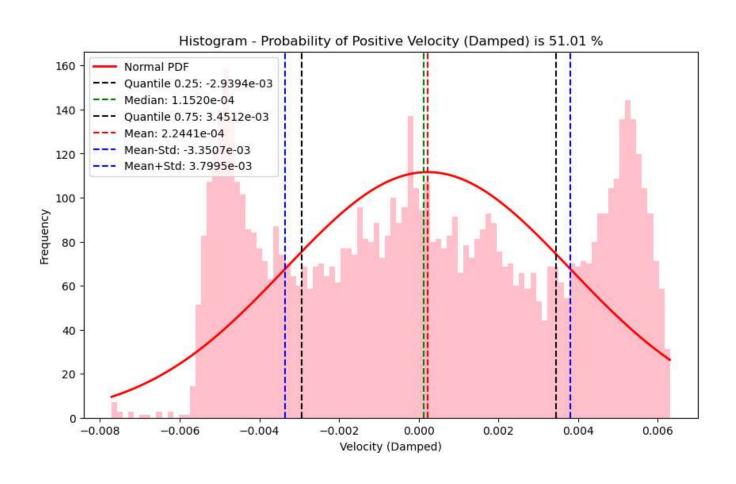
Histogram - Probability of Positive Displacement X (Undamped) is 89.24 % Normal PDF Quantile 0.25: 1.6142e-04 1000 Median: 6.4055e-04 Quantile 0.75: 1.1550e-03 Mean: 6.7924e-04 800 Mean-Std: 1.3242e-04 Mean+Std: 1.2261e-03 Frequency 600 400 200 -0.000250.00000 0.00025 0.00050 0.00075 0.00100 0.00125 0.00150 0.00175 Displacement X (Undamped)





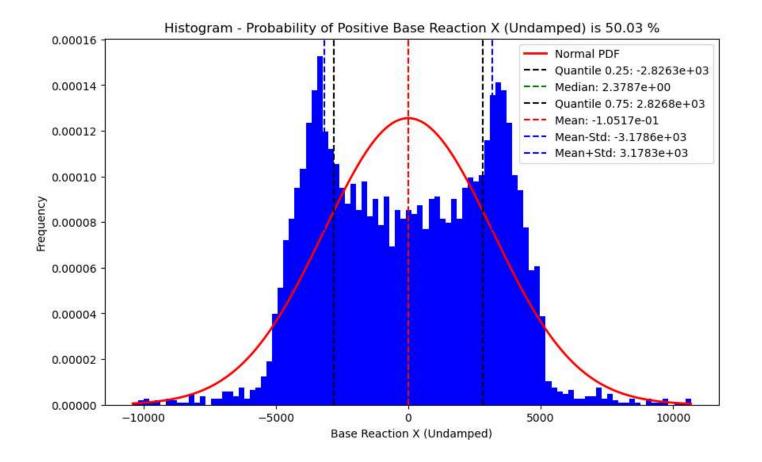


Histogram - Probability of Positive Velocity (Undamped) is 51.07 % Normal PDF Quantile 0.25: -3.2260e-03 350 -- Median: 1.2323e-04 Quantile 0.75: 3.8854e-03 Mean: 2.7065e-04 300 --- Mean-Std: -3.6760e-03 --- Mean+Std: 4.2173e-03 250 Frequency 00 150 100 50 0.000 0.002 -0.006 -0.004 -0.002 0.004 0.006 -0.008Velocity (Undamped)



Histogram - Probability of Positive Acceleration (Undamped) is 50.67 % Normal PDF --- Quantile 0.25: -1.5997e-02 --- Median: 3.8841e-04 --- Quantile 0.75: 1.5975e-02 --- Mean: 9.7345e-05 --- Mean-Std: -1.7025e-02 --- Mean+Std: 1.7219e-02 Frequency 8 20 -10 --0.02 0.02 0.04 -0.040.00 Acceleration (Undamped)

Histogram - Probability of Positive Acceleration (Damped) is 50.69 % Normal PDF Quantile 0.25: -1.4608e-02 --- Median: 3.8071e-04 --- Quantile 0.75: 1.4608e-02 --- Mean: 7.8697e-05 --- Mean-Std: -1.5603e-02 --- Mean+Std: 1.5760e-02 25 -Frequency 00 15 10 -5 --0.02 0.02 -0.040.00 0.04 Acceleration (Damped)



Histogram - Probability of Positive Base Reaction X (Damped) is 50.03 % 0.00016 Normal PDF Quantile 0.25: -2.5068e+03 --- Median: 2.4851e+00 0.00014 Quantile 0.75: 2.5045e+03 --- Mean: -3.7901e-01 Mean-Std: -2.9453e+03 0.00012 --- Mean+Std: 2.9445e+03 0.00010 Frequency 8000000 0.00006 0.00004 0.00002 0.00000 -10000 -5000 5000 10000 Base Reaction X (Damped)

