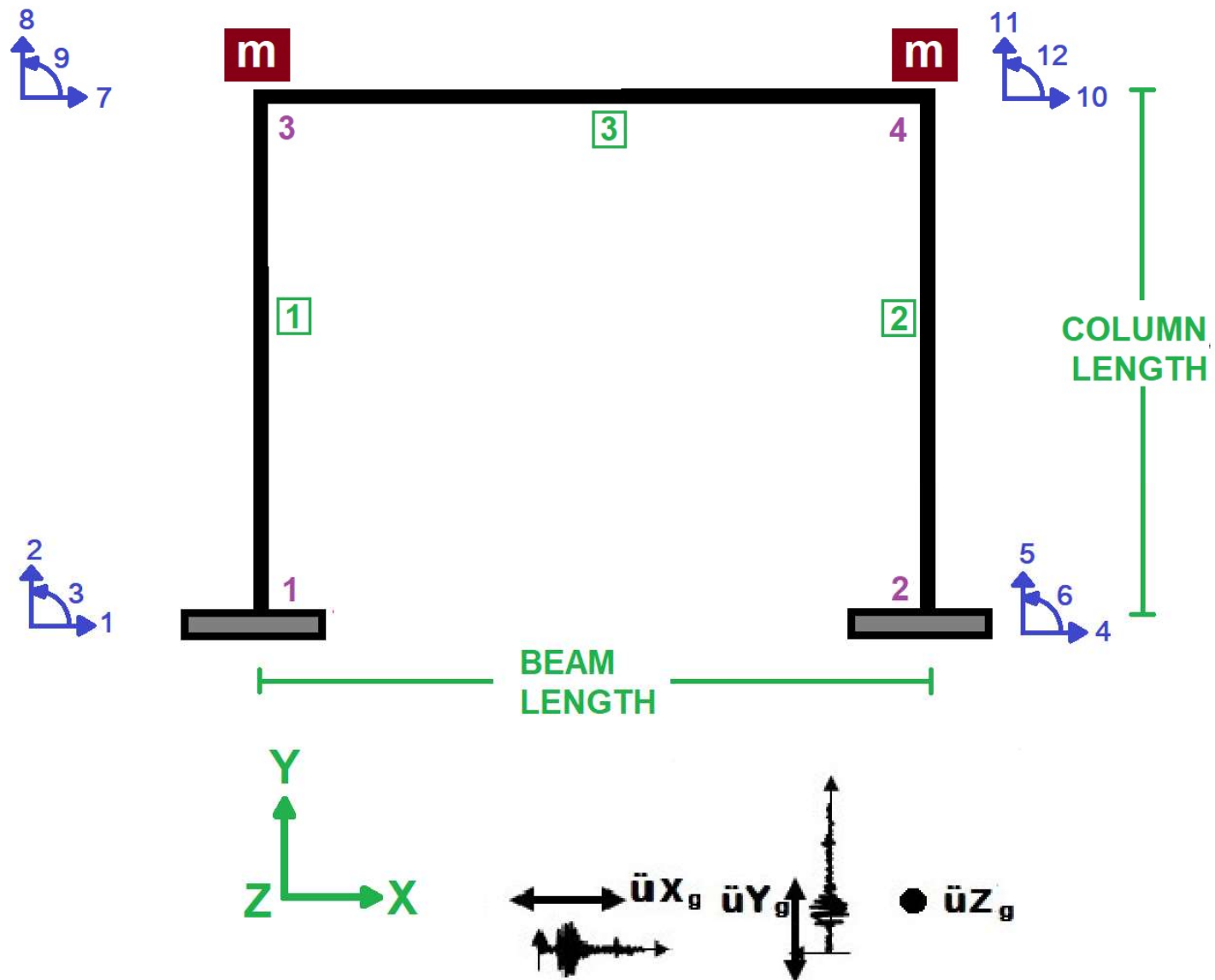
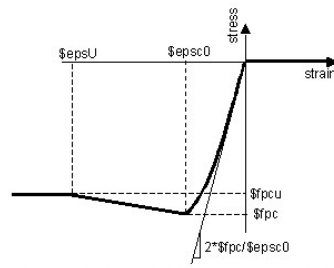


IN THE NAME OF ALLAH

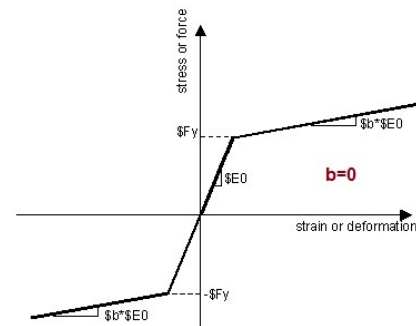
SEISMIC RESPONSE SPECTRUM ANALYSIS OF CONCRETE FRAME USING OPENSEES

WRITTEN BY SALAR DELAVAR GHASHGHAEI (QASHQAI)

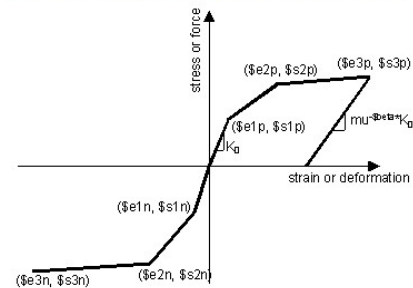




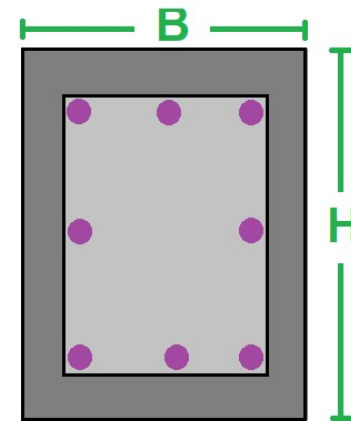
CORE AND COVER CONCRETE REALTION



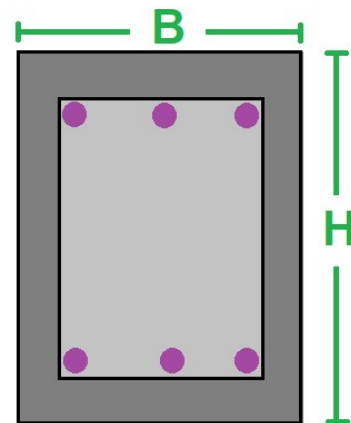
WITHOUT HARDENING AND ULTIMATE STRAIN



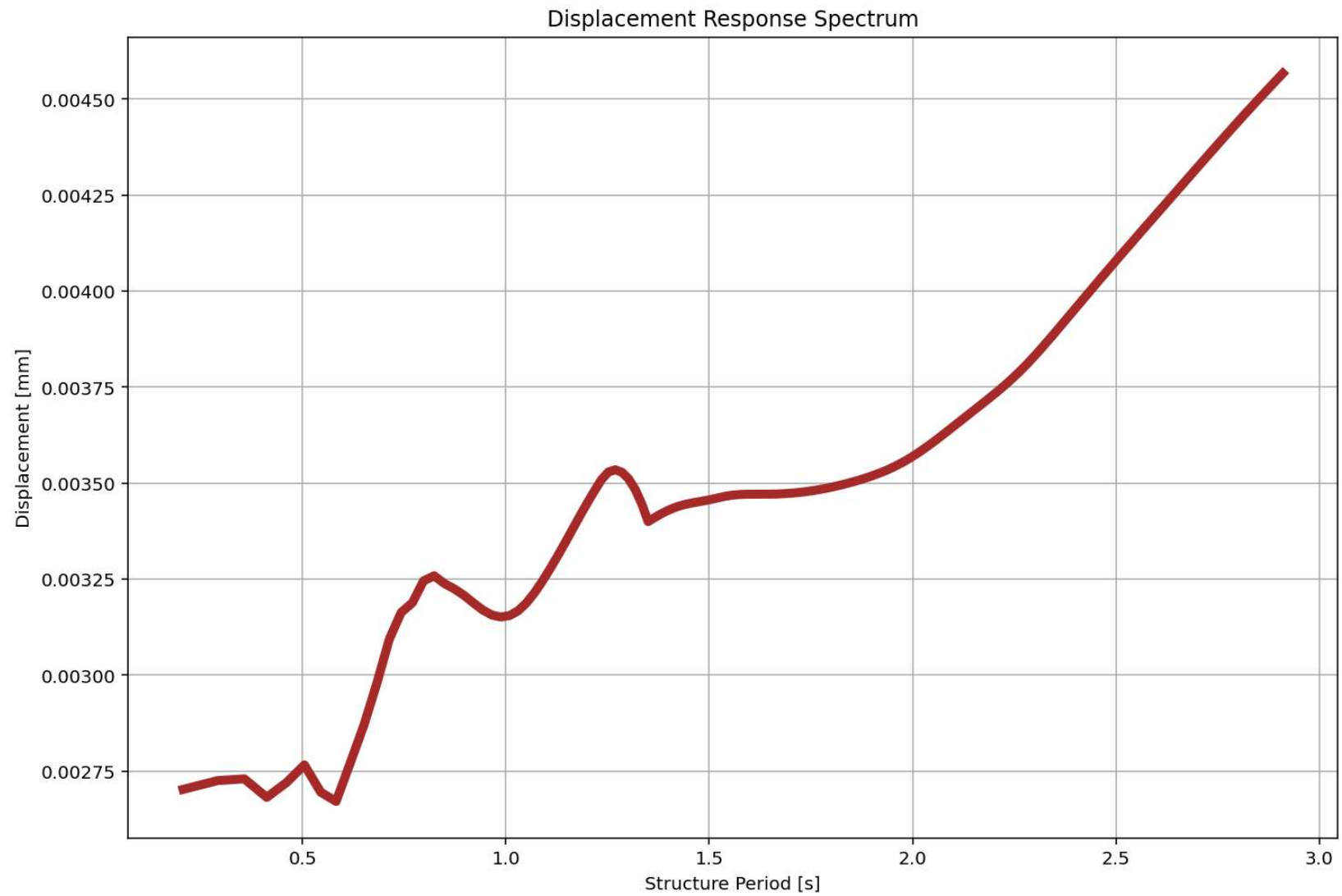
WITH HARDENING AND ULTIMATE STRAIN

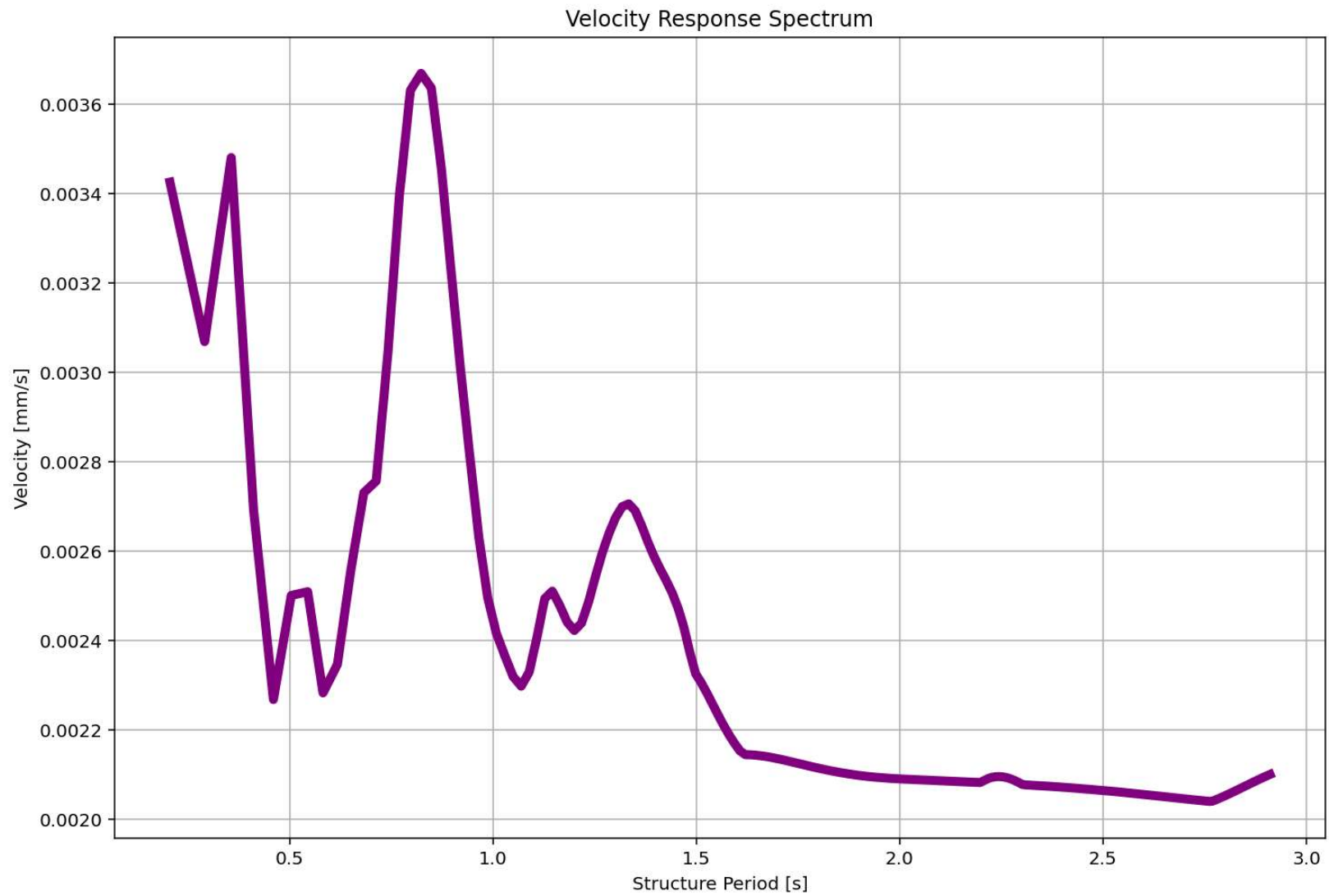


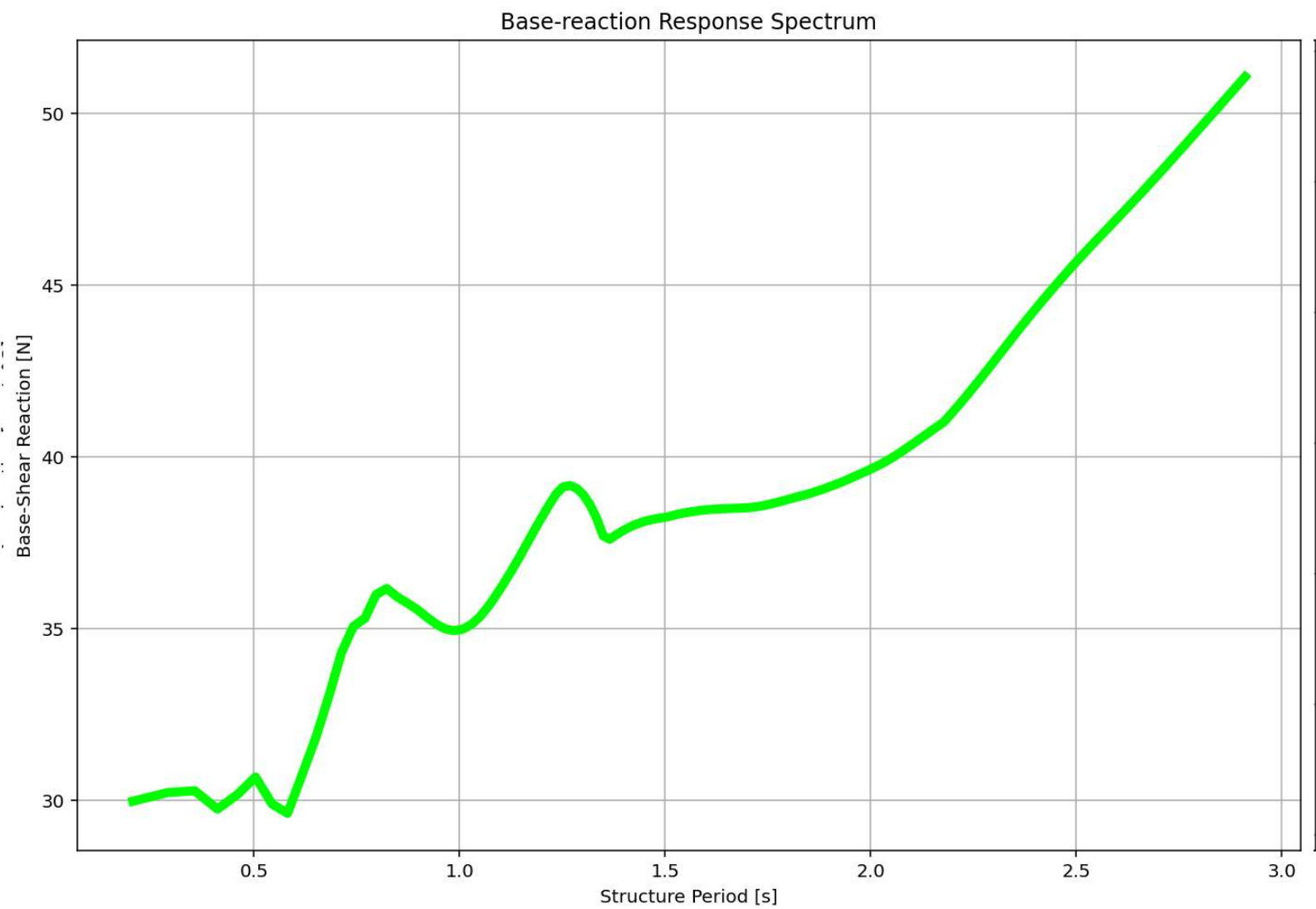
COLUMN SECTION



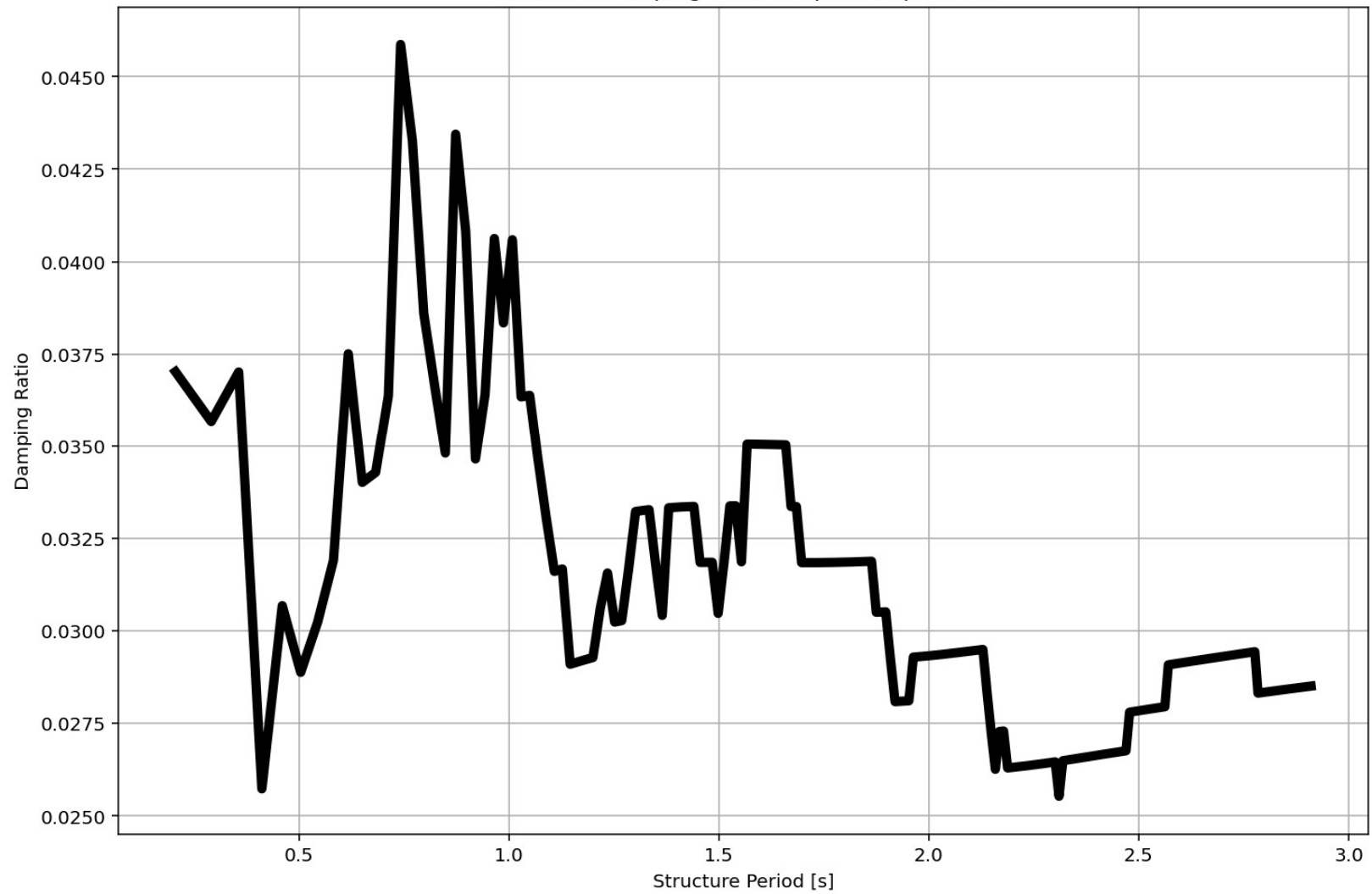
BEAM SECTION

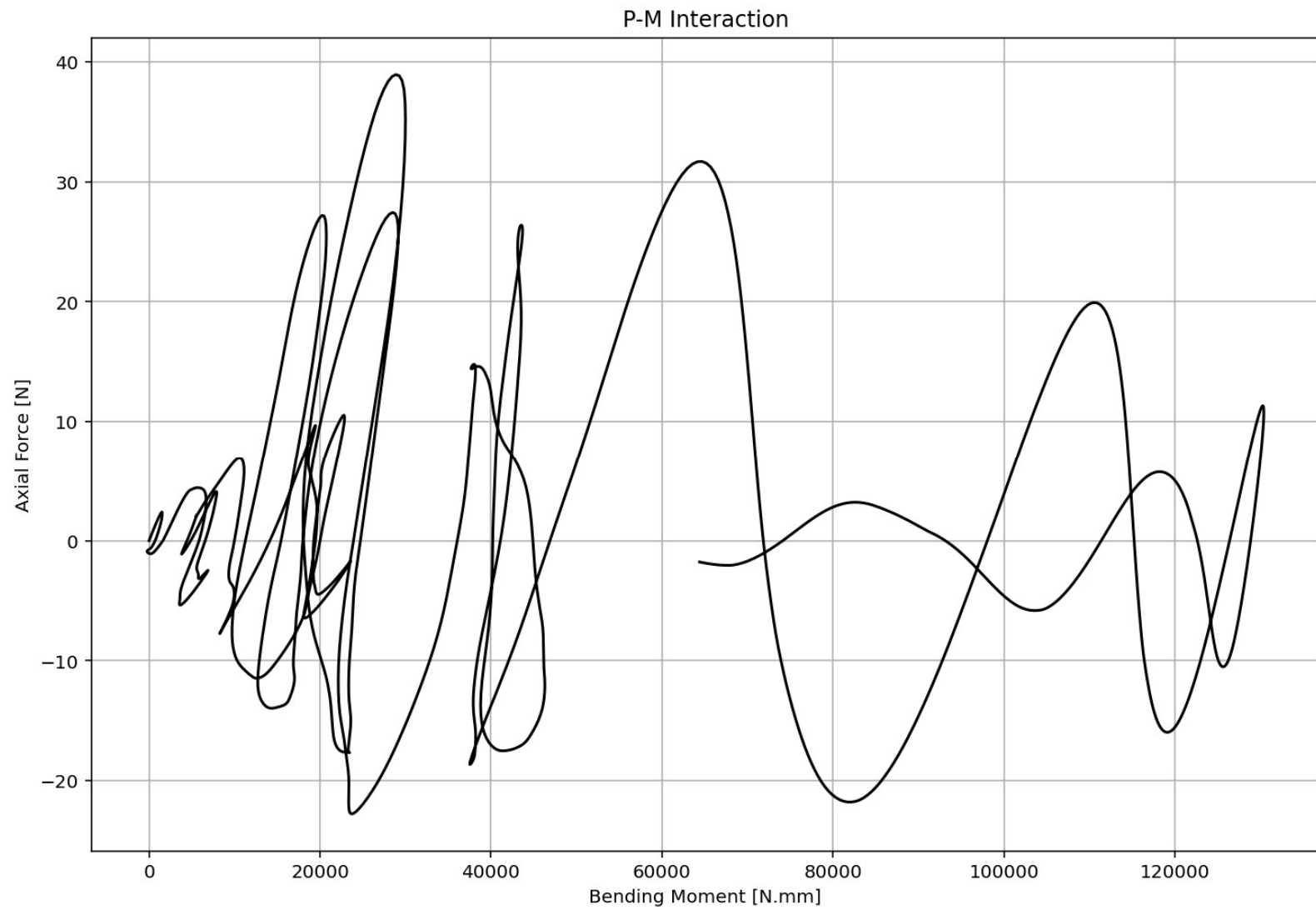


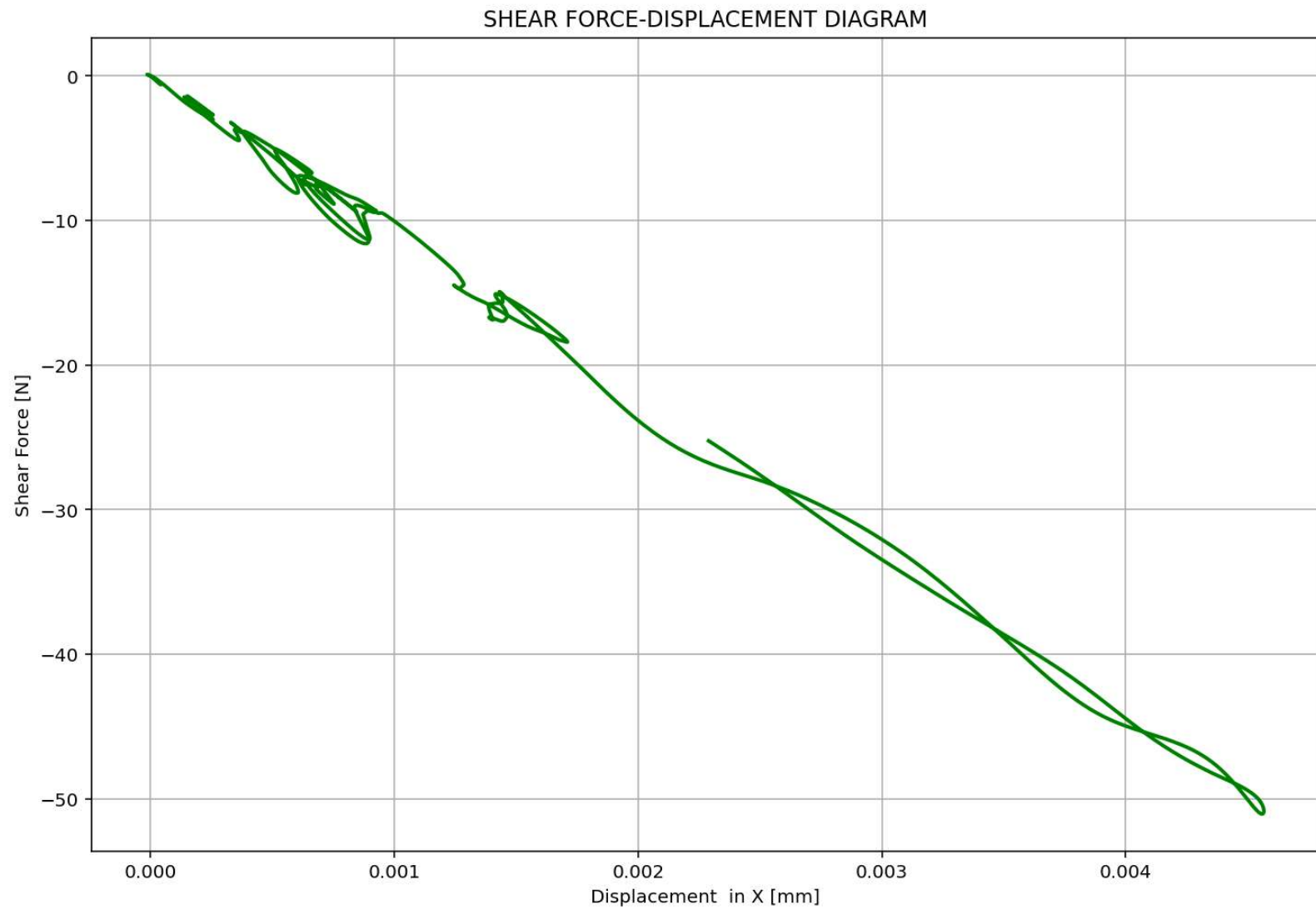


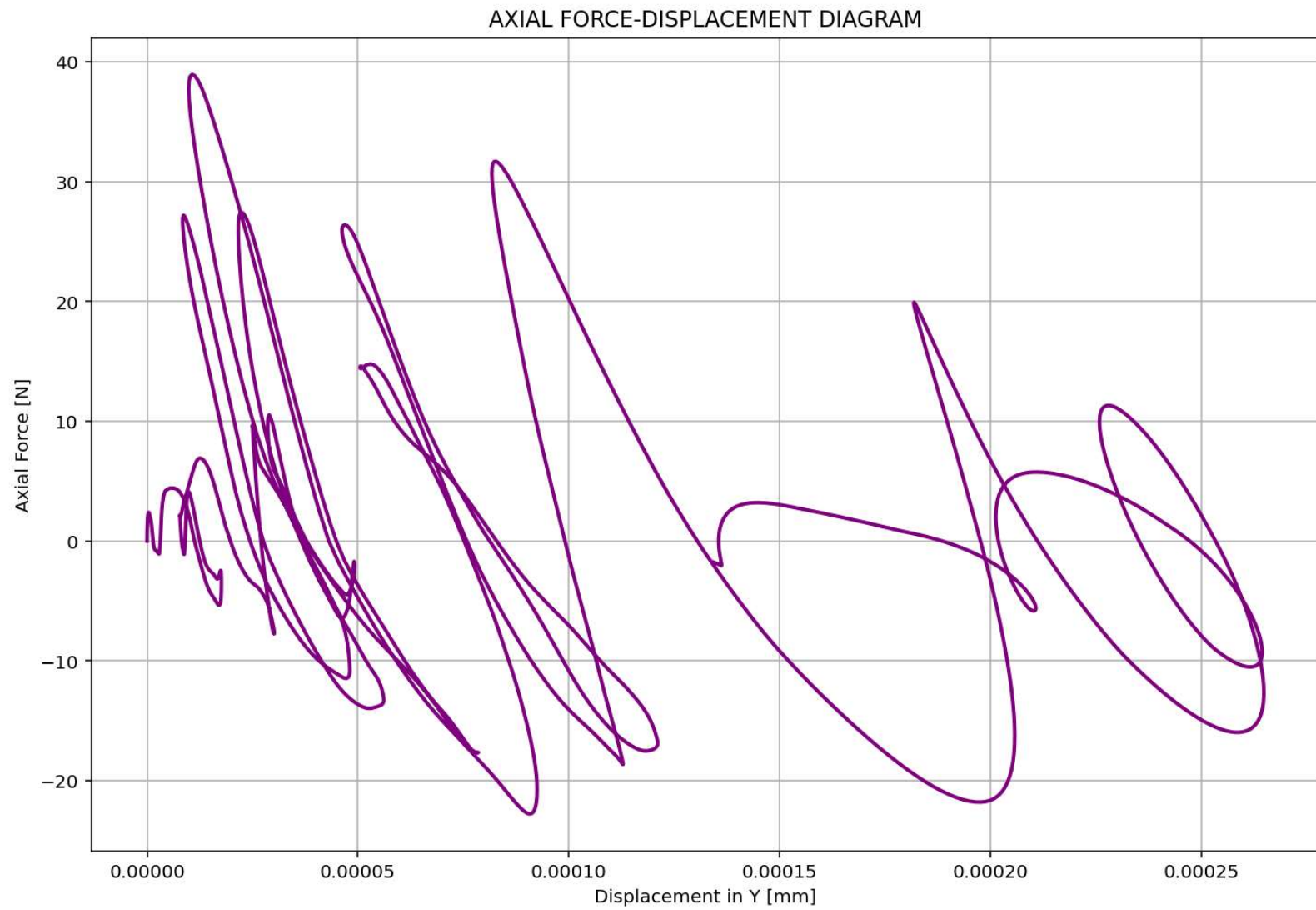


Structure Damping Ratio Response Spectrum

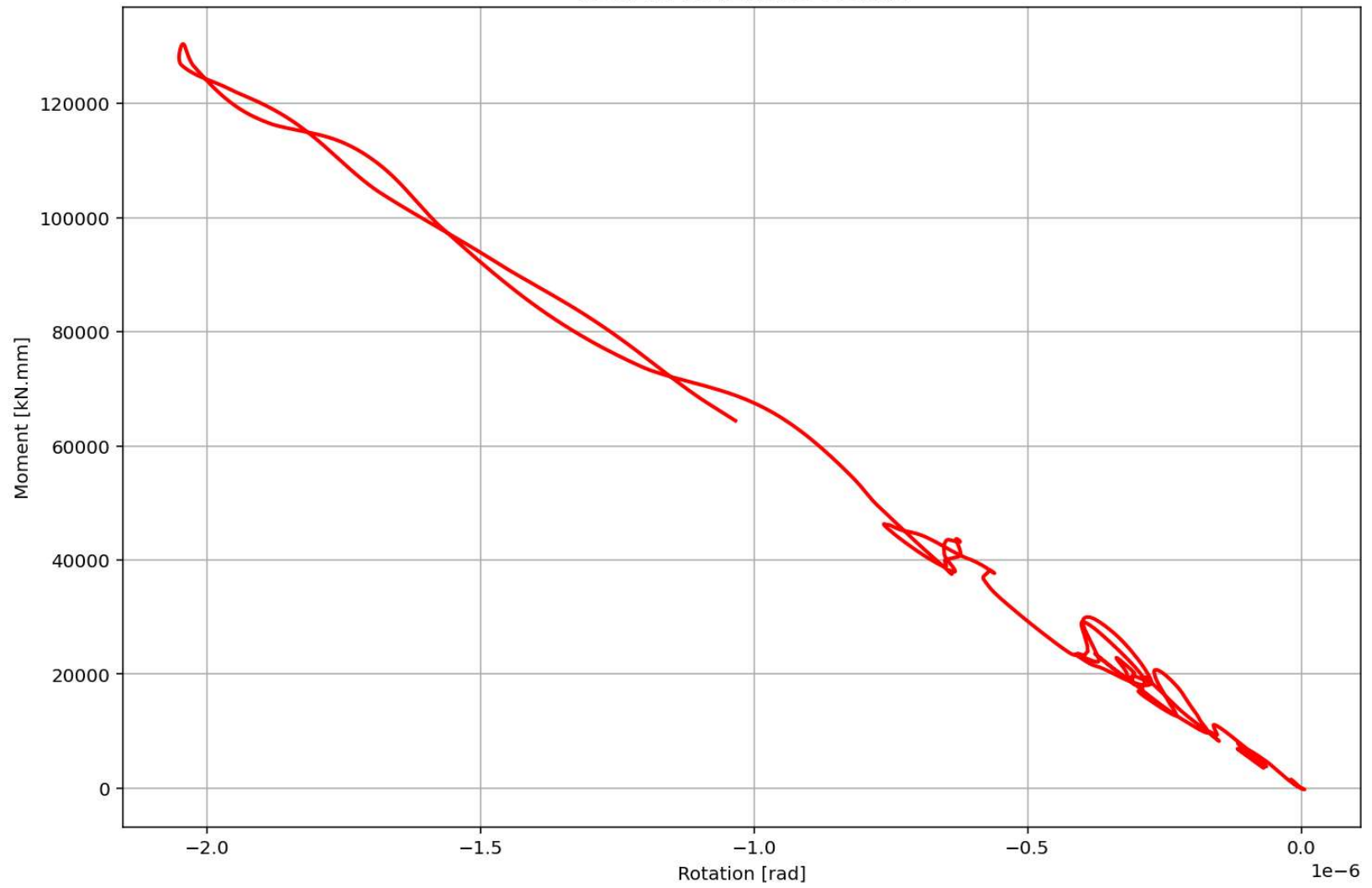




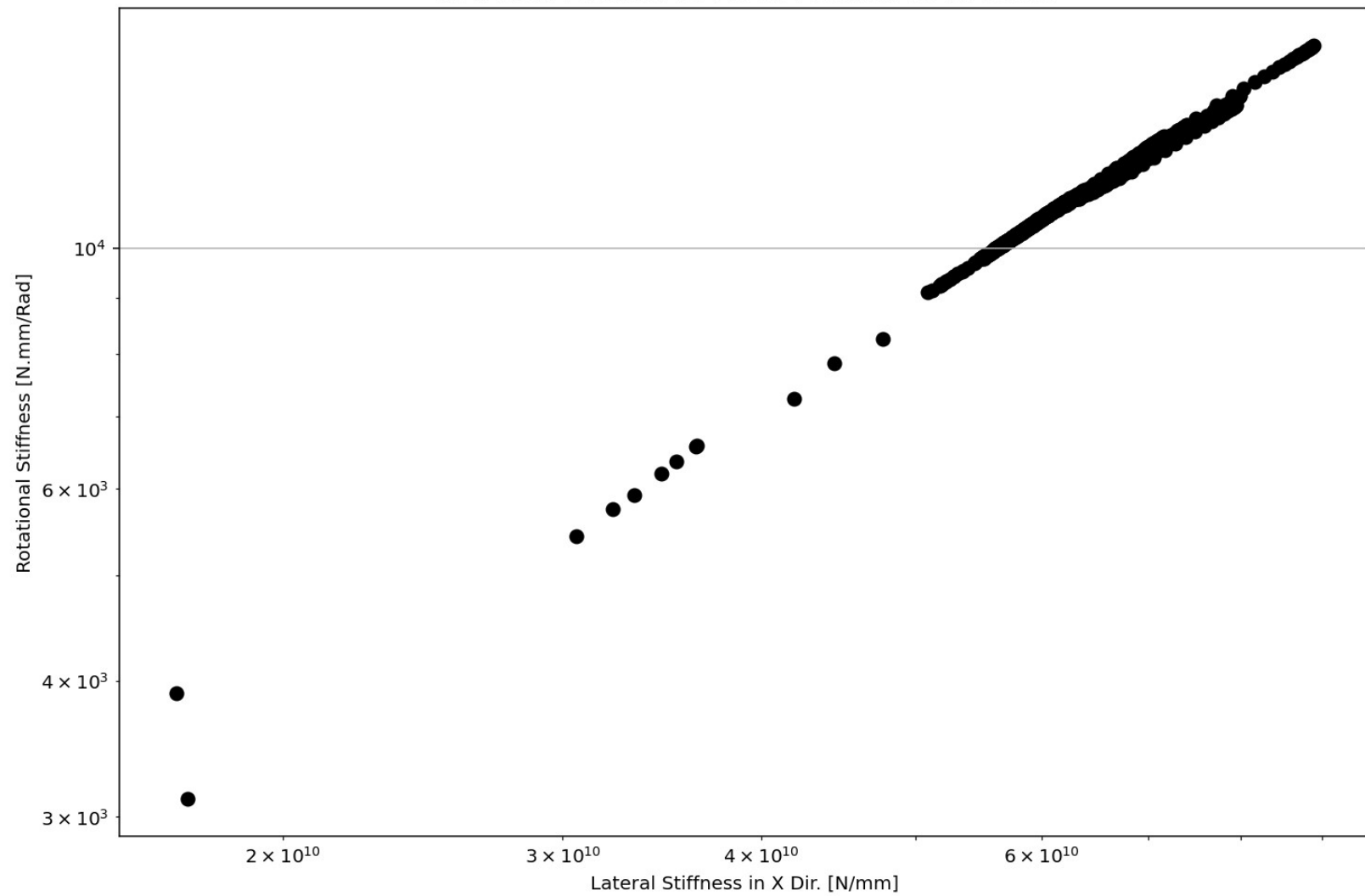




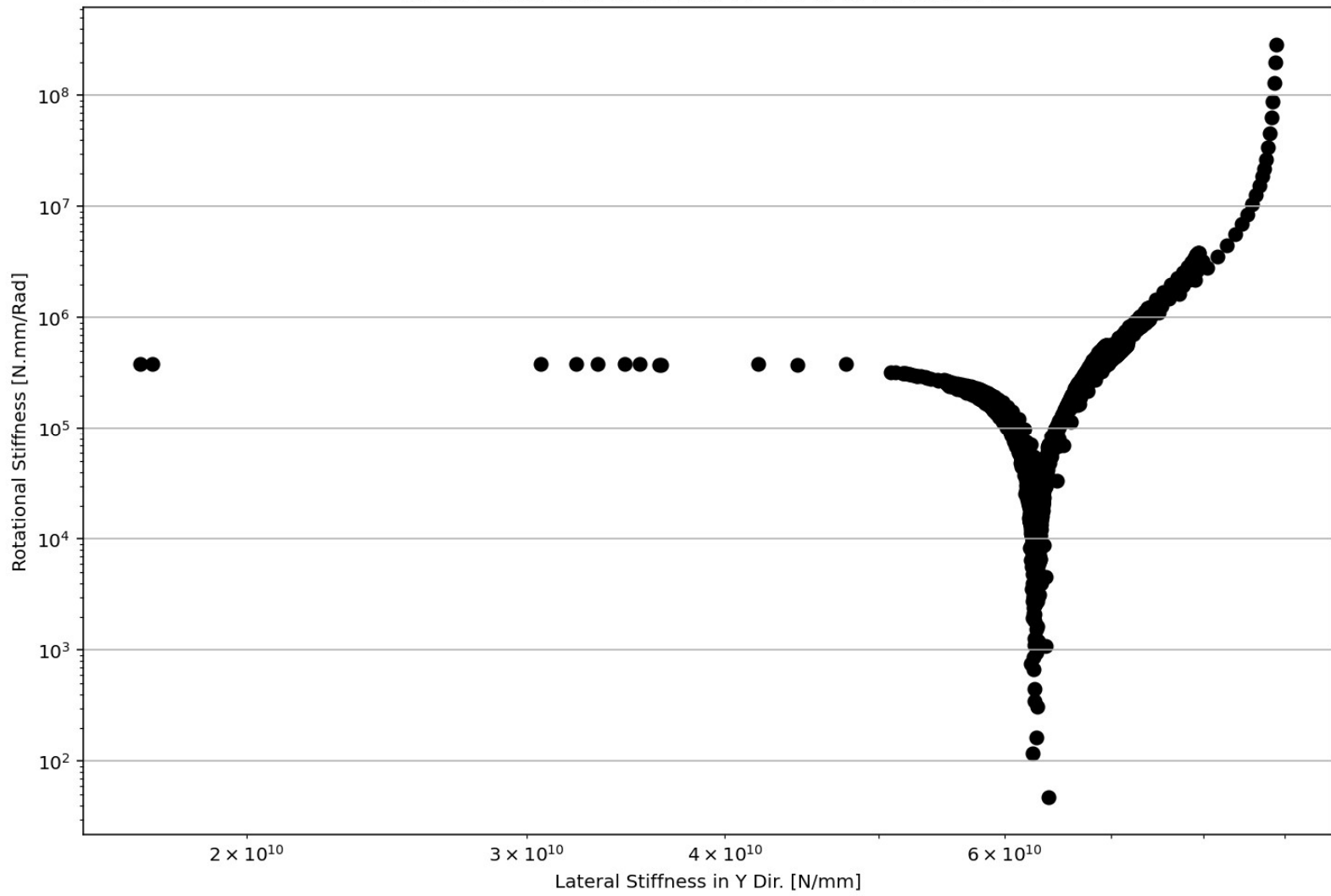
MOMENT-ROTATION DIAGRAM

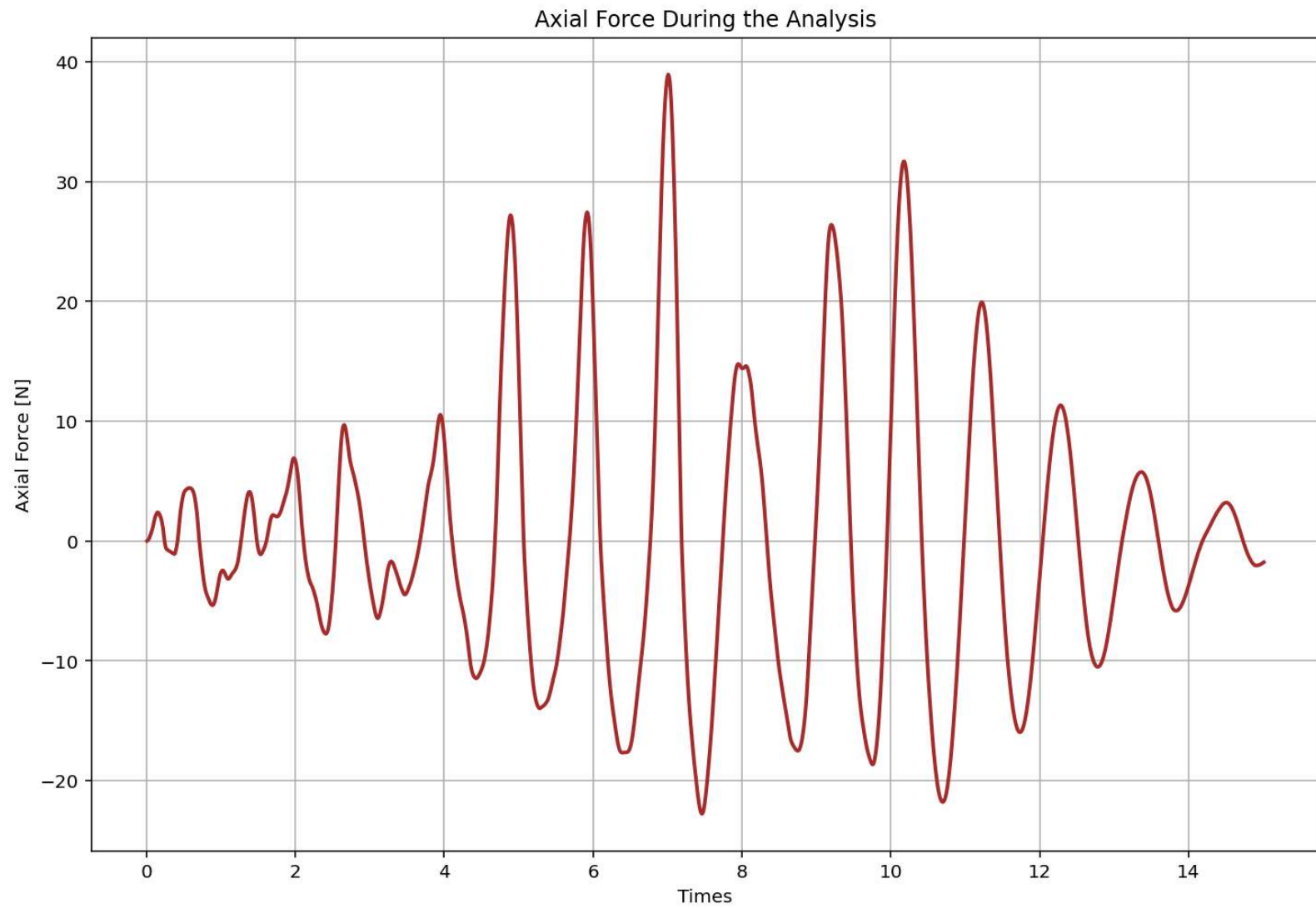


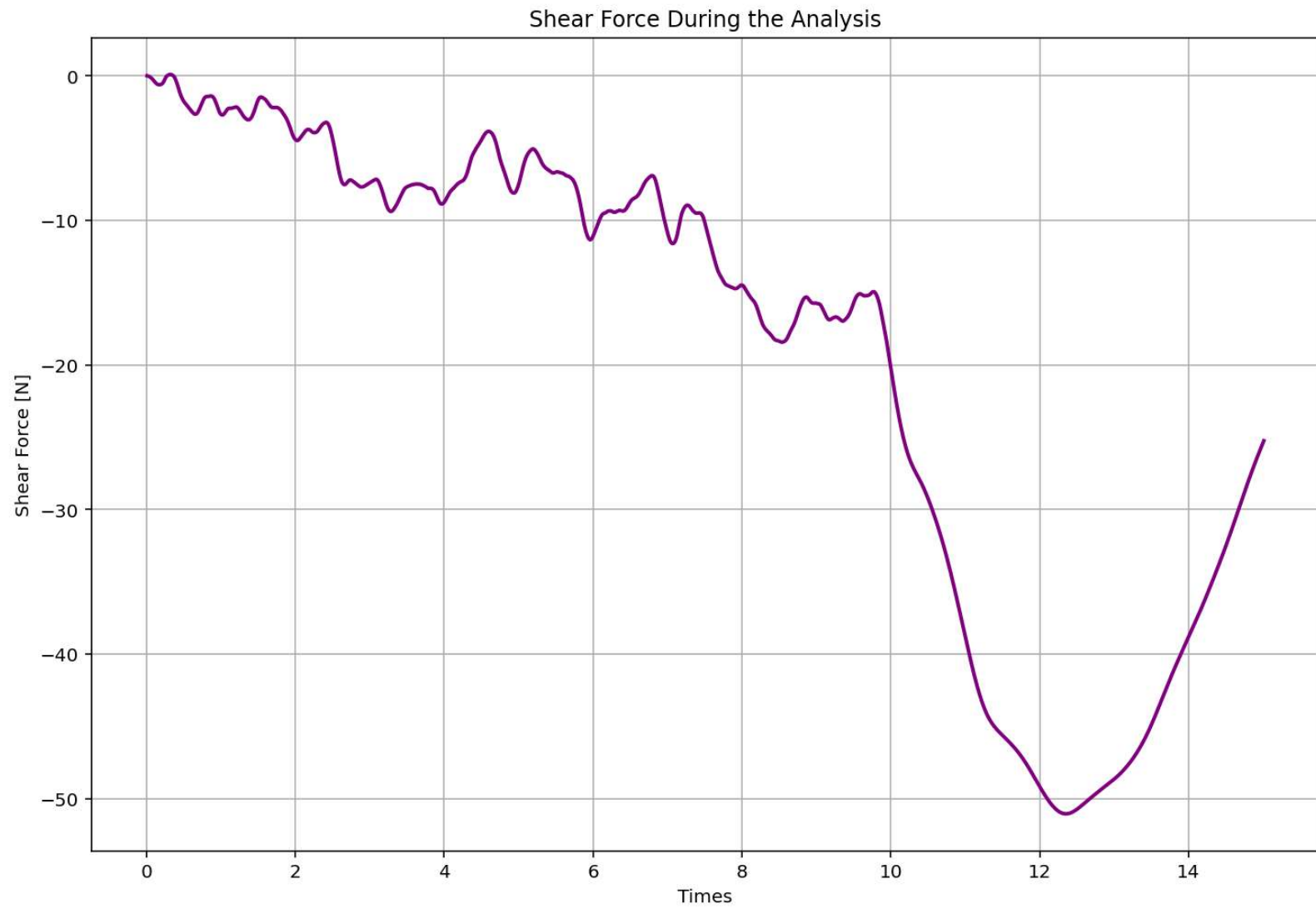
ROTATIONAL STIFFNESS-LATERAL STIFFNESS DIAGRAM



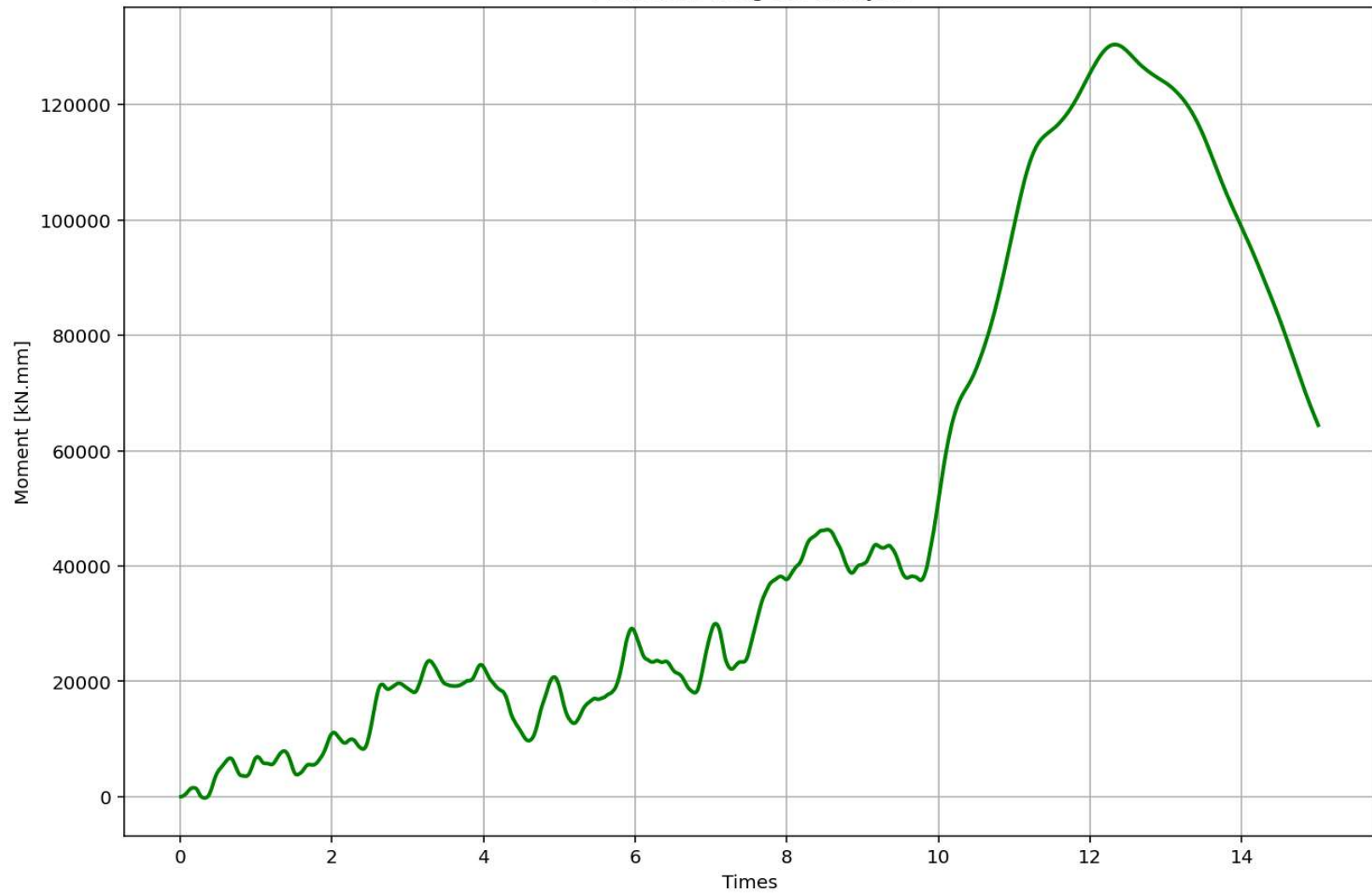
ROTATIONAL STIFFNESS-LATERAL STIFFNESS DIAGRAM

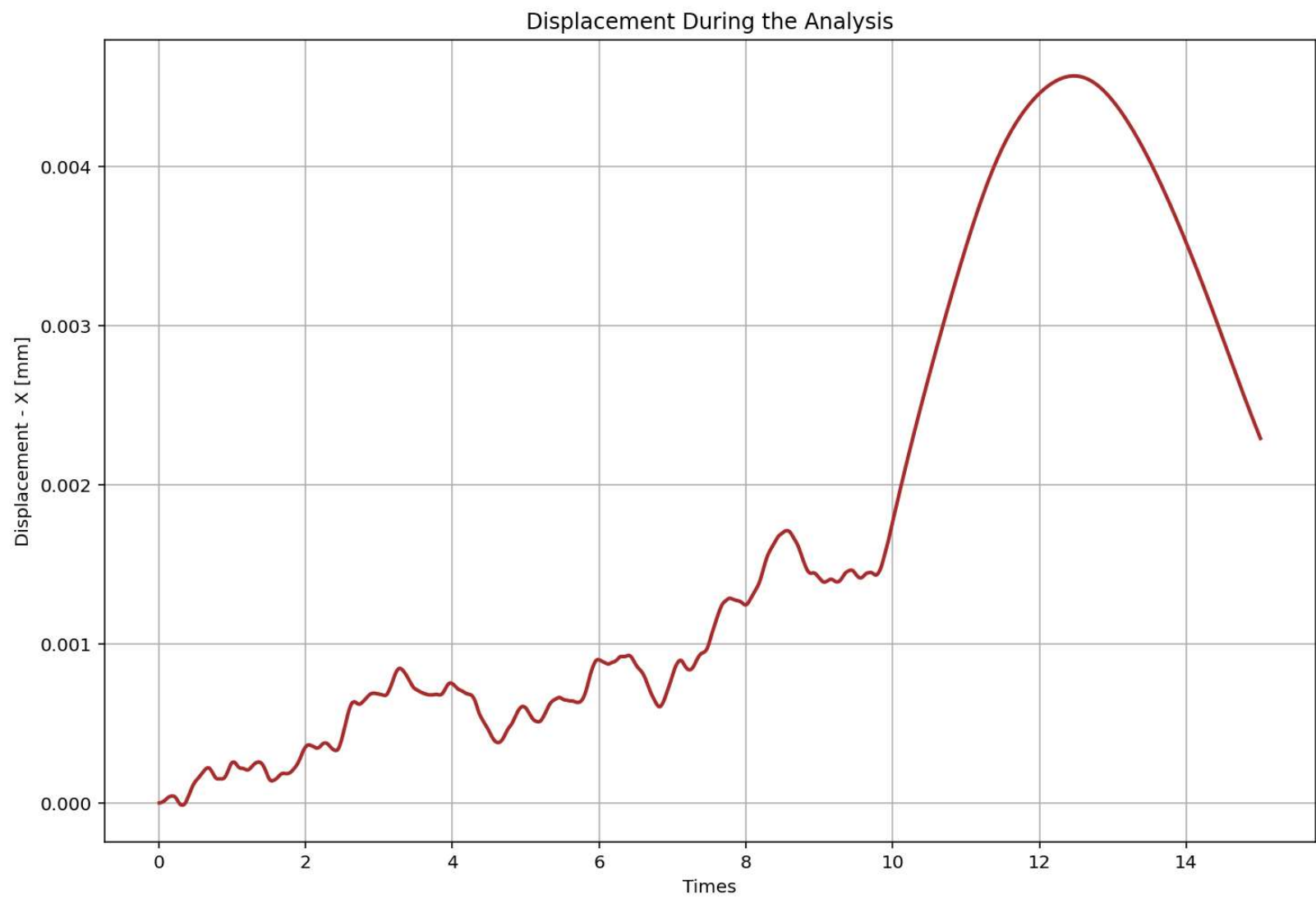


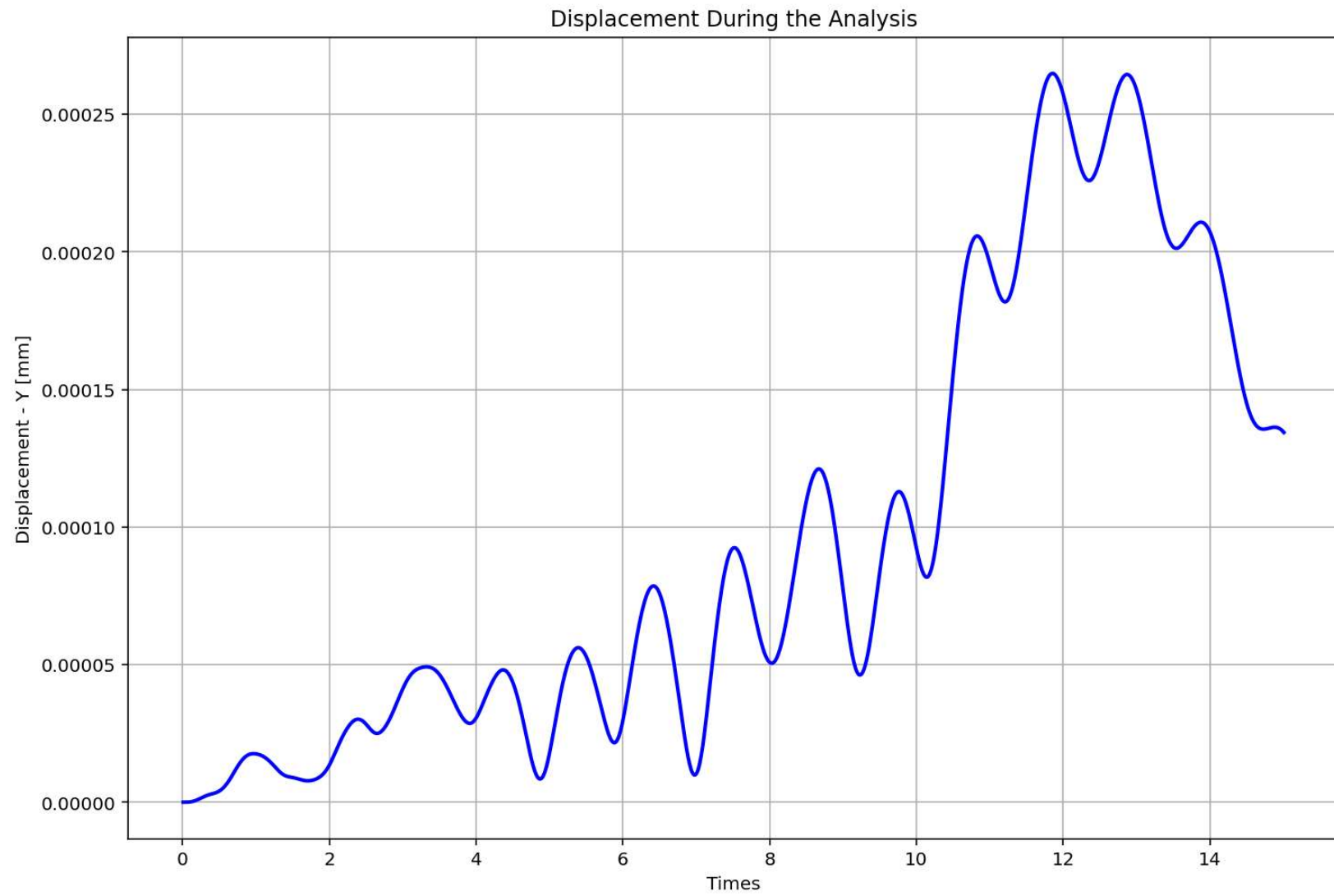


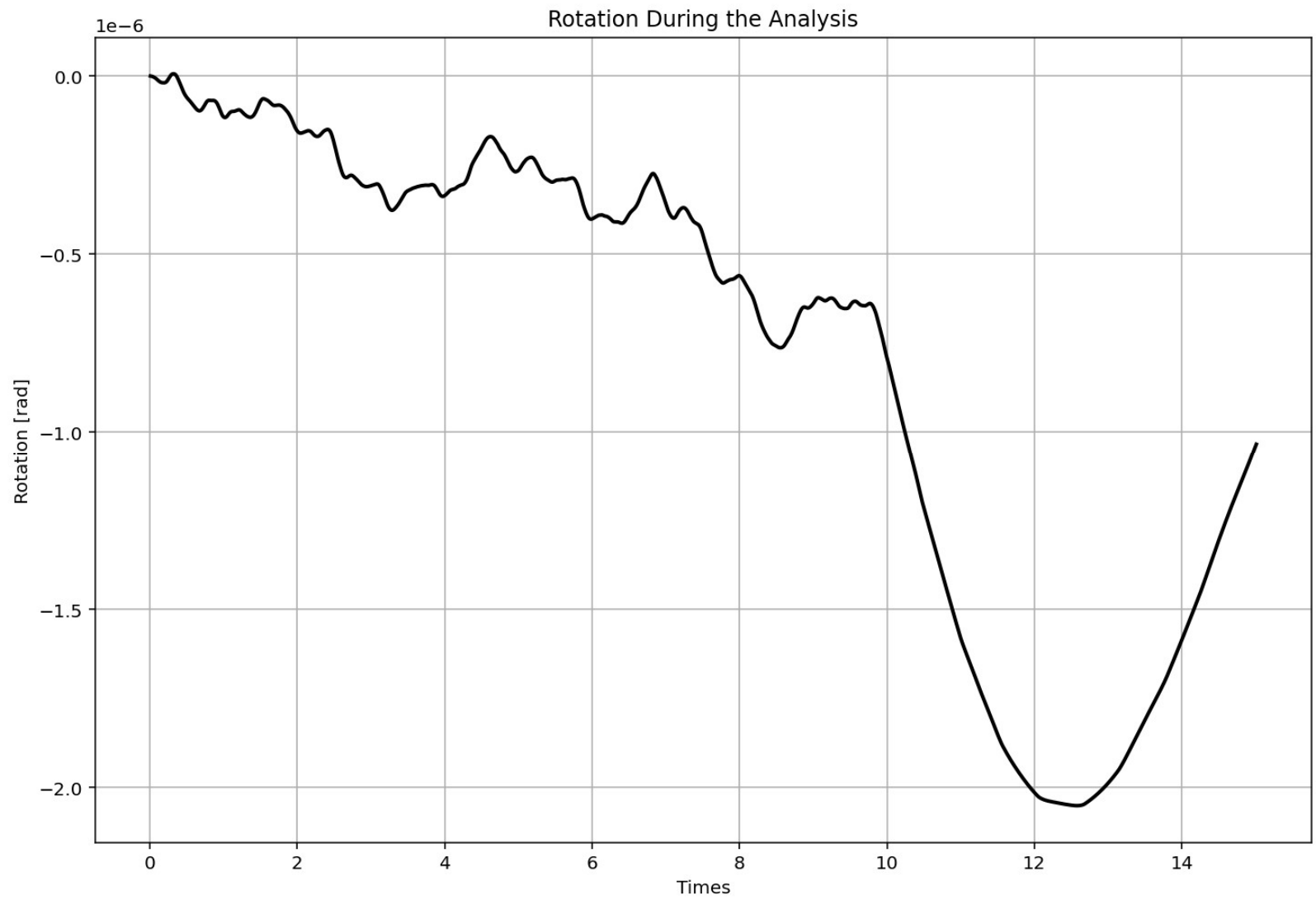


Moment During the Analysis

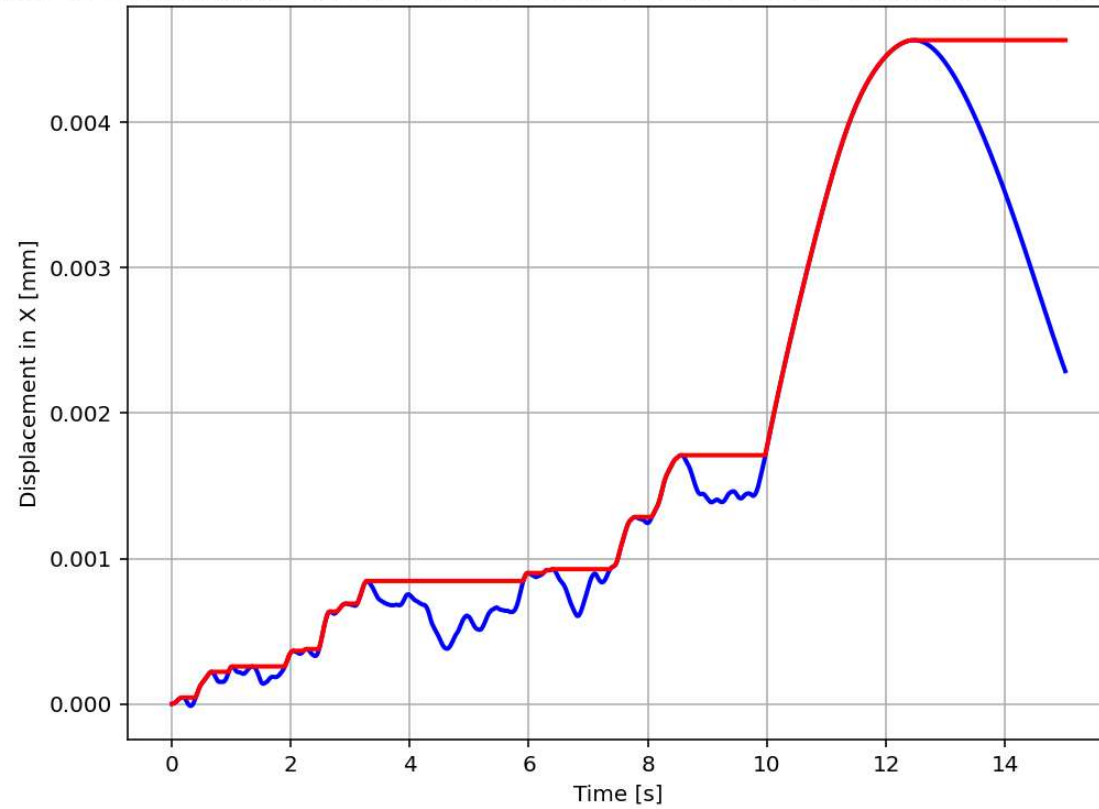




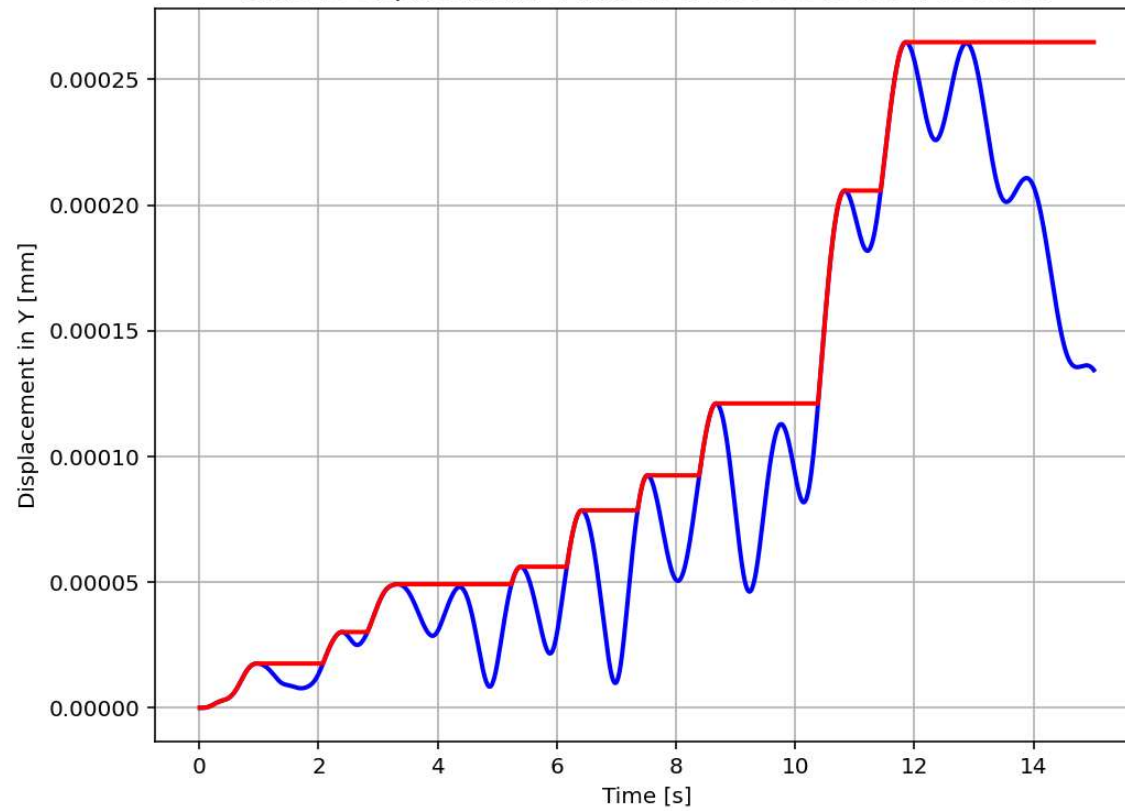


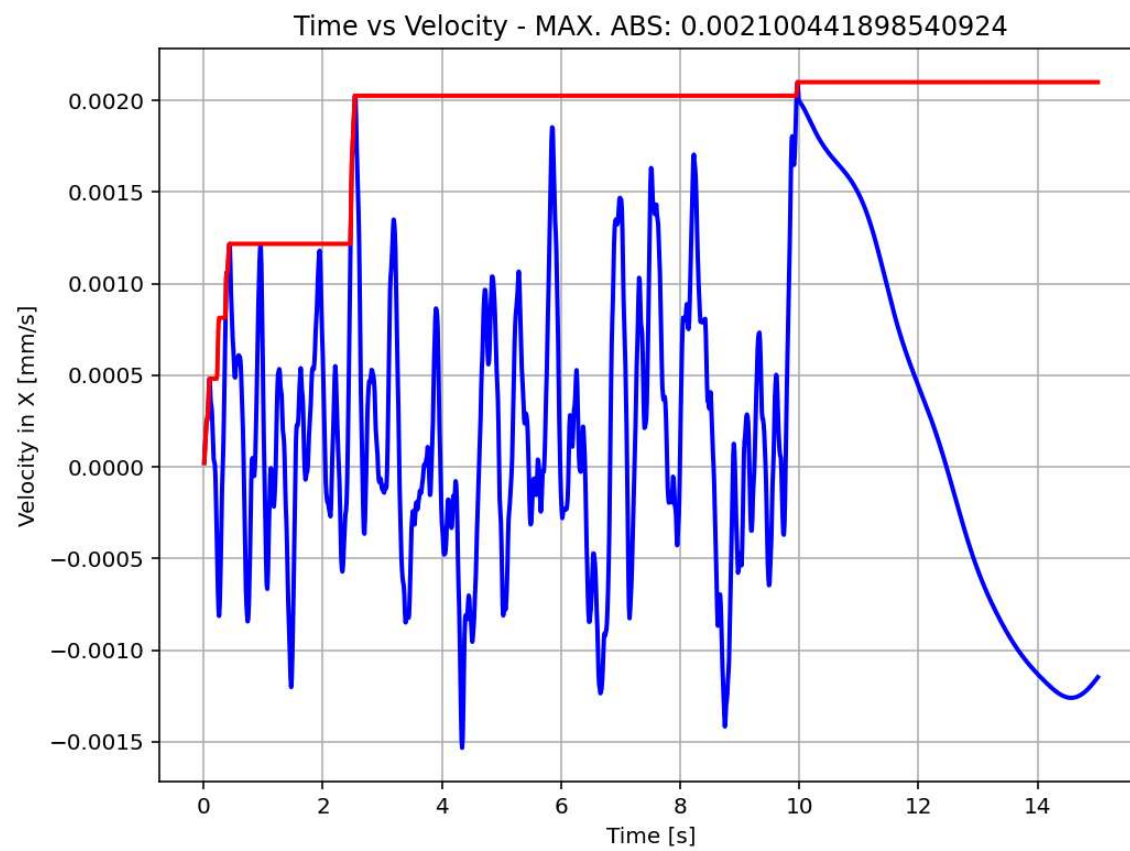


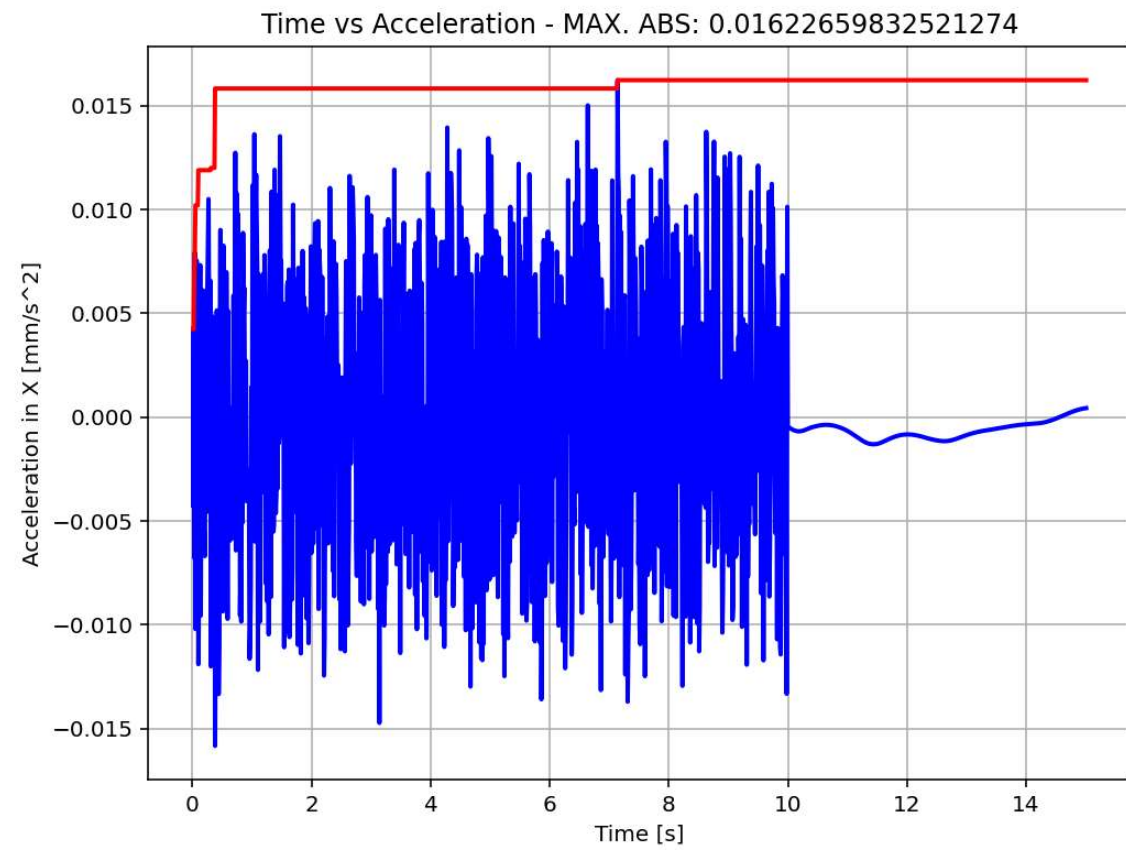
Time vs Displacement - MAX. ABS: 0.0045665909037155335 | ξ (Calculated): 2.85049e+00 %



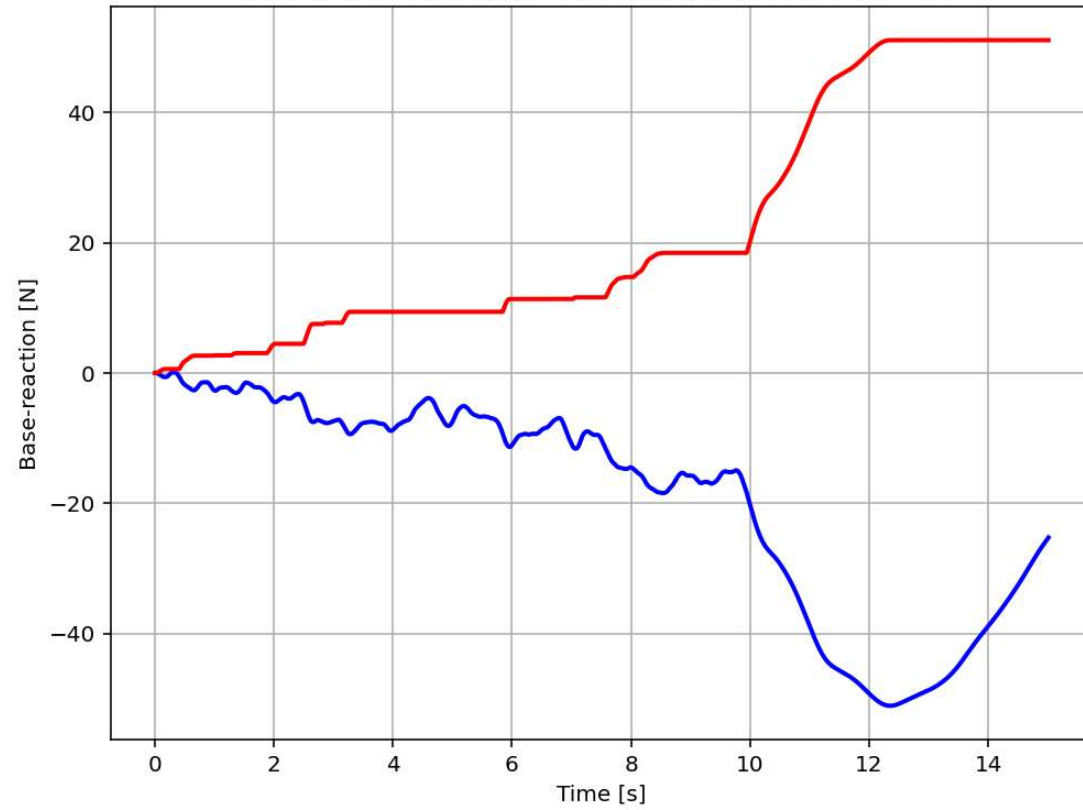
Time vs Displacement - MAX. ABS: 0.0002648496278372759







Time vs Base-reaction - MAX. ABS: 51.0612272228055



Last Analysis Structural Response + Ground Motion ::: MAX. ABS. : 0.0162

