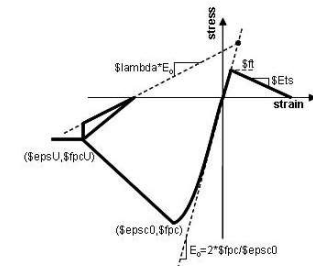
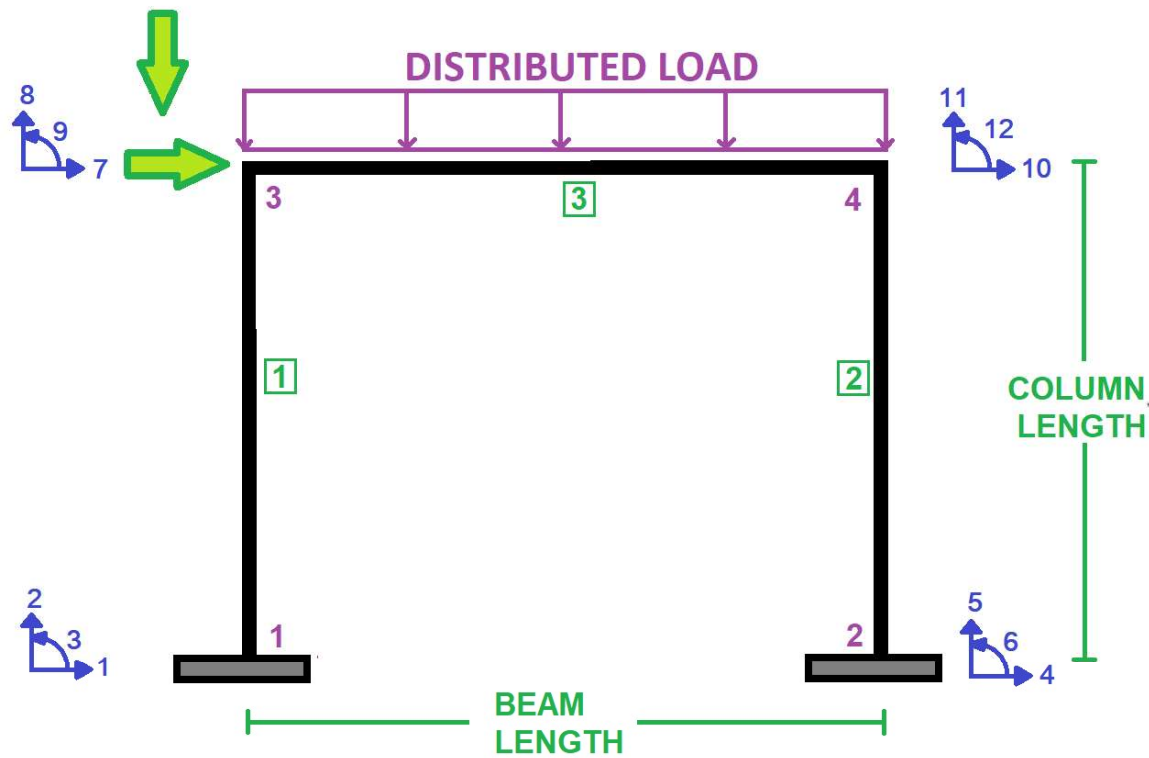


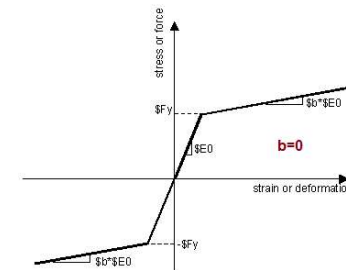
IN THE NAME OF ALLAH

**SENSITIVITY ANALYSIS OF CONCRETE FRAME BY CHANGING
COLUMN REBAR DIAMETER AND COLUMN SECTION DEPTH.
ANALYZING CREEP AND SHRINKAGE OF A CONCRETE FRAME.
EVALUATING STRAIN HARDENING USING OPENSEES
AND CALCULATE STRUCTURAL BEHAVIOR COEFFICIENT**

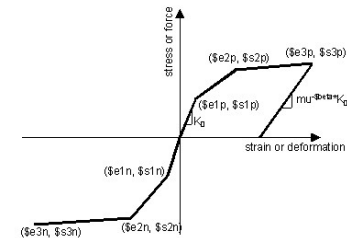
WRITTEN BY SALAR DELAVAR GHASHGHAEI (QASHQAI)



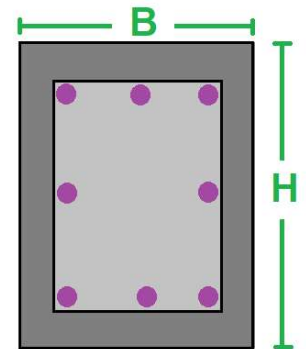
CORE AND COVER CONCRETE REALTION



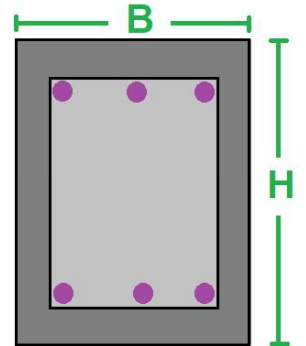
WITHOUT HARDENING AND ULTIMATE STRAIN



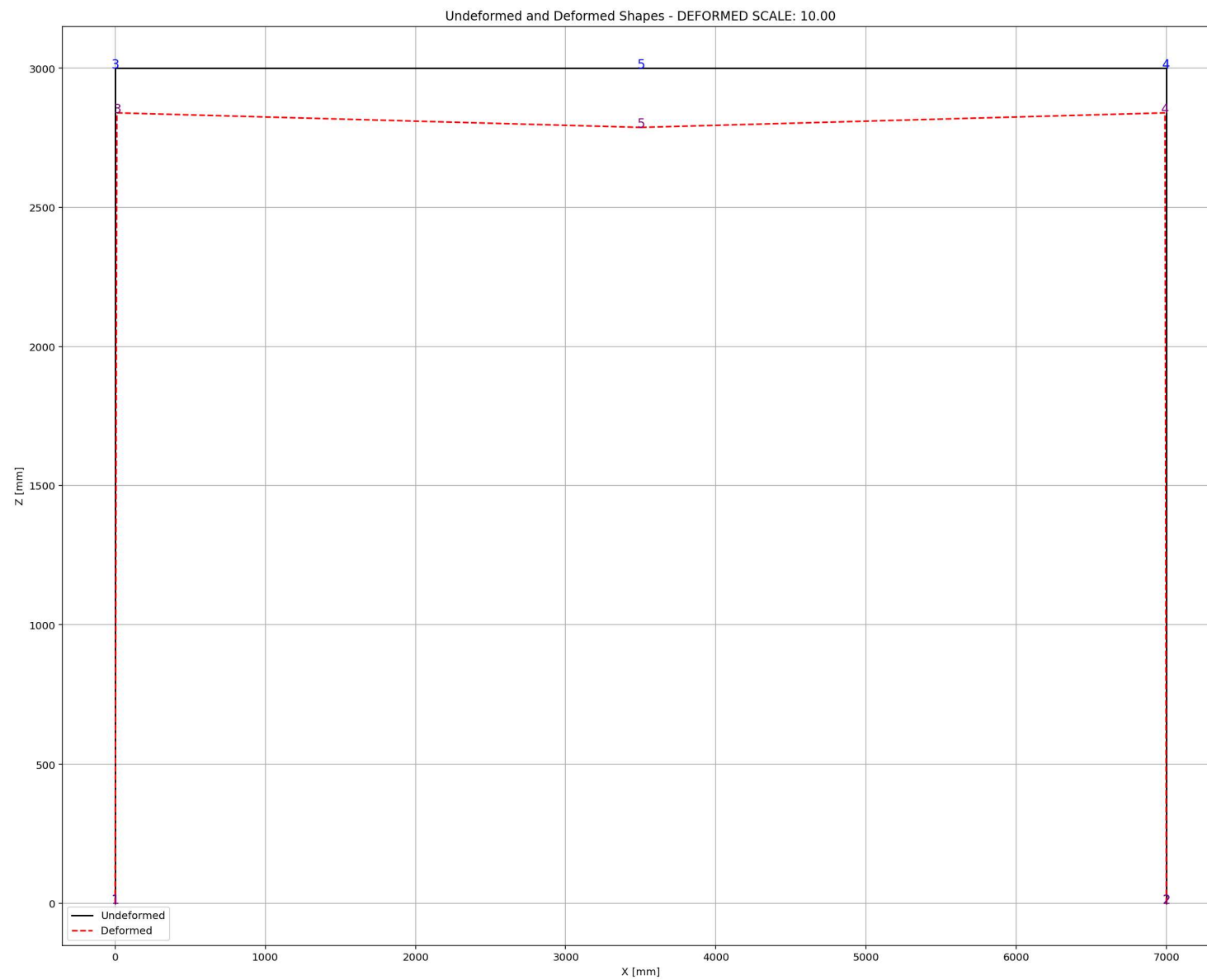
WITH HARDENING AND ULTIMATE STRAIN



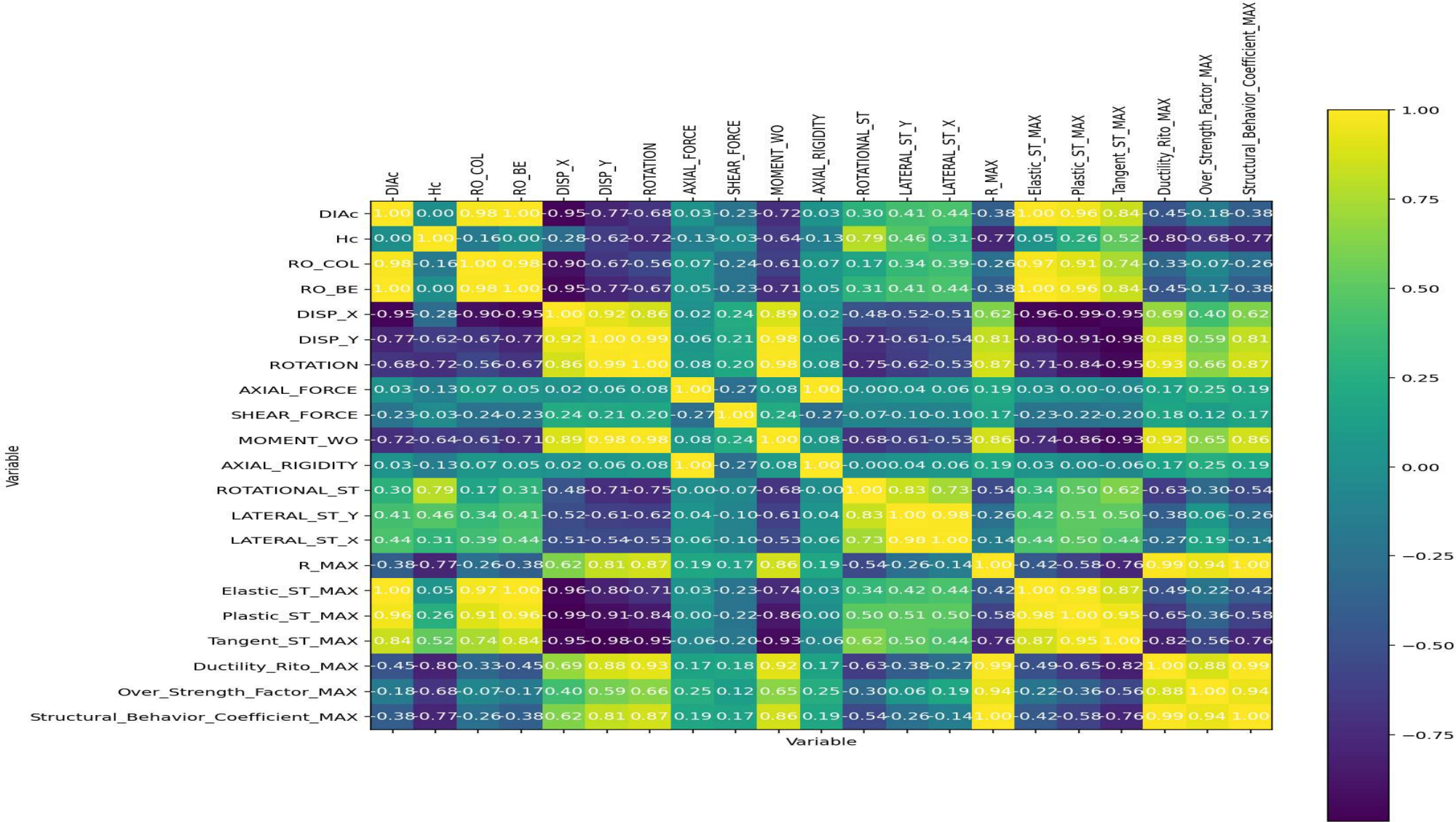
COLUMN SECTION



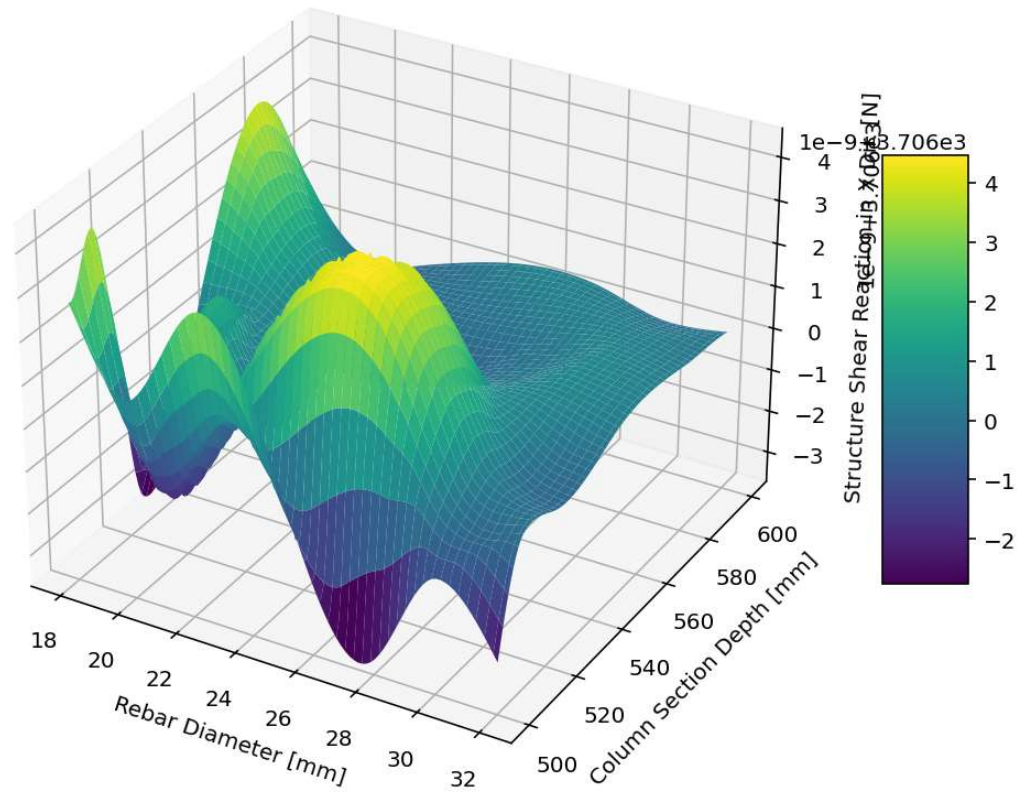
BEAM SECTION



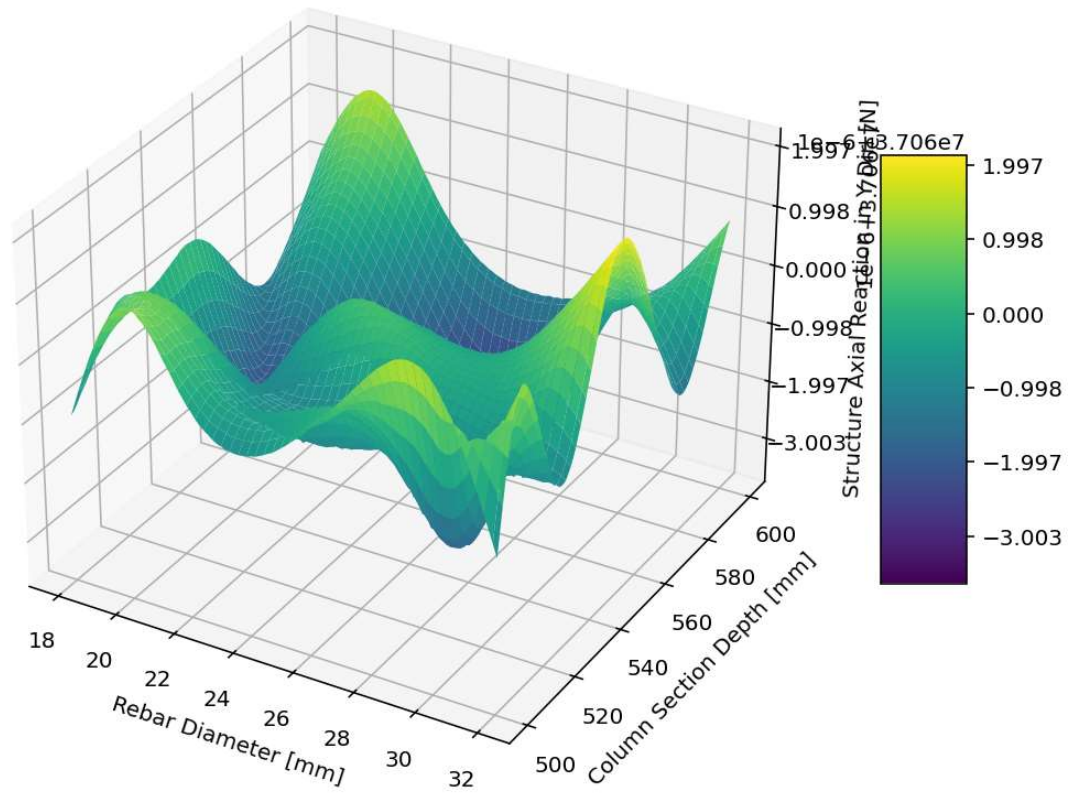
Correlation Heatmap



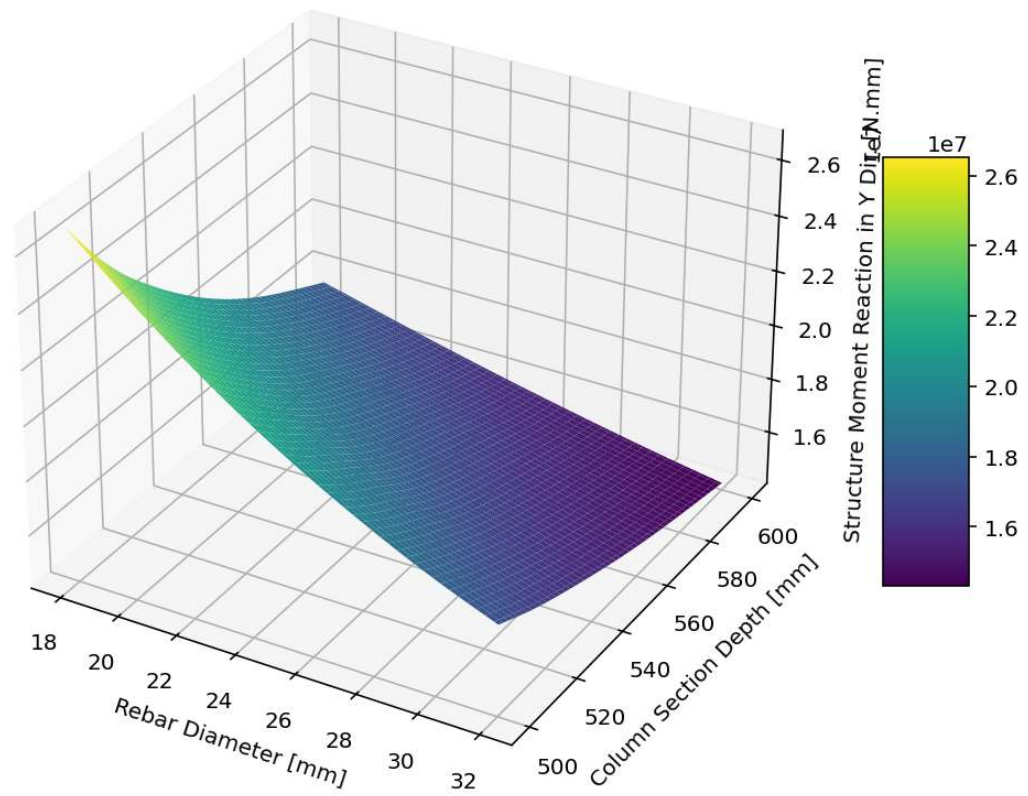
3D Contour Plot of Structure Shear Reaction in X Dir. [N]



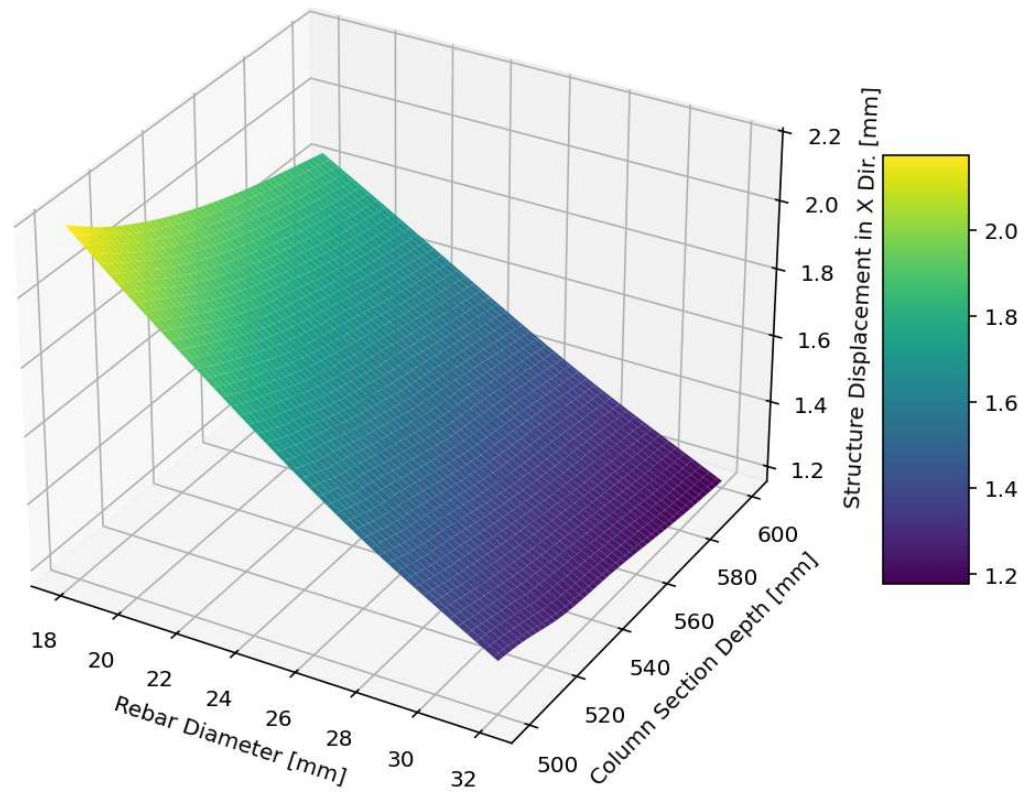
3D Contour Plot of Structure Axial Reaction in Y Dir. [N]



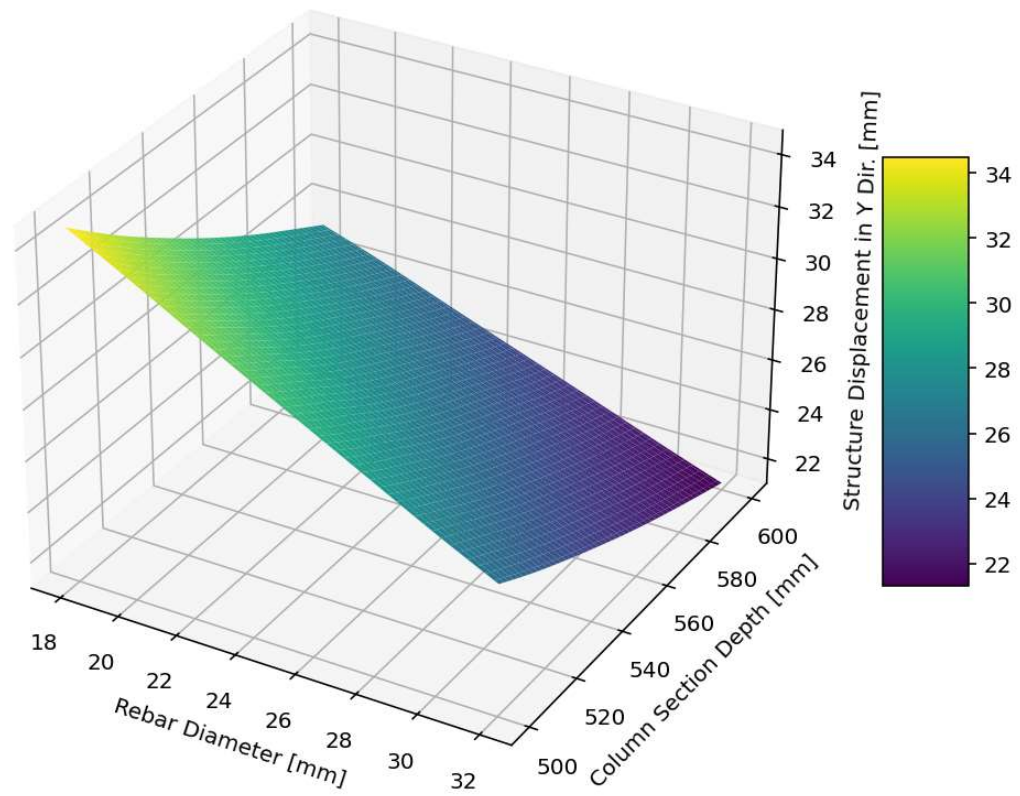
3D Contour Plot of Structure Moment Reaction in Y Dir. [N.mm]



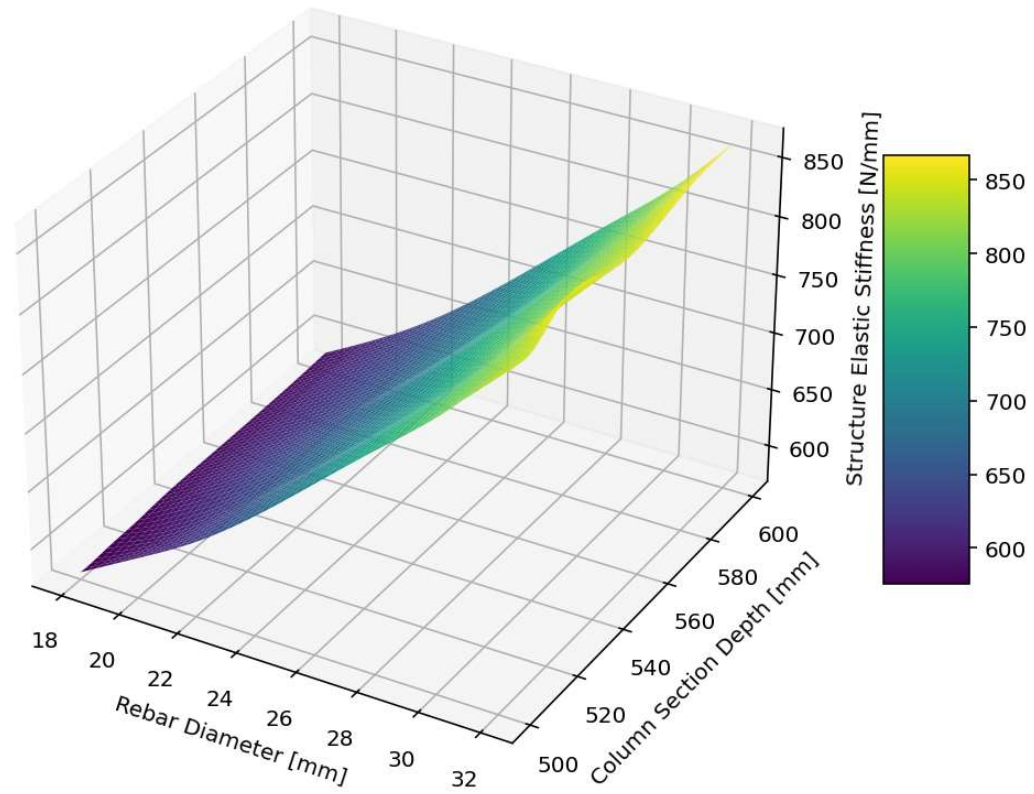
3D Contour Plot of Structure Displacement in X Dir. [mm]



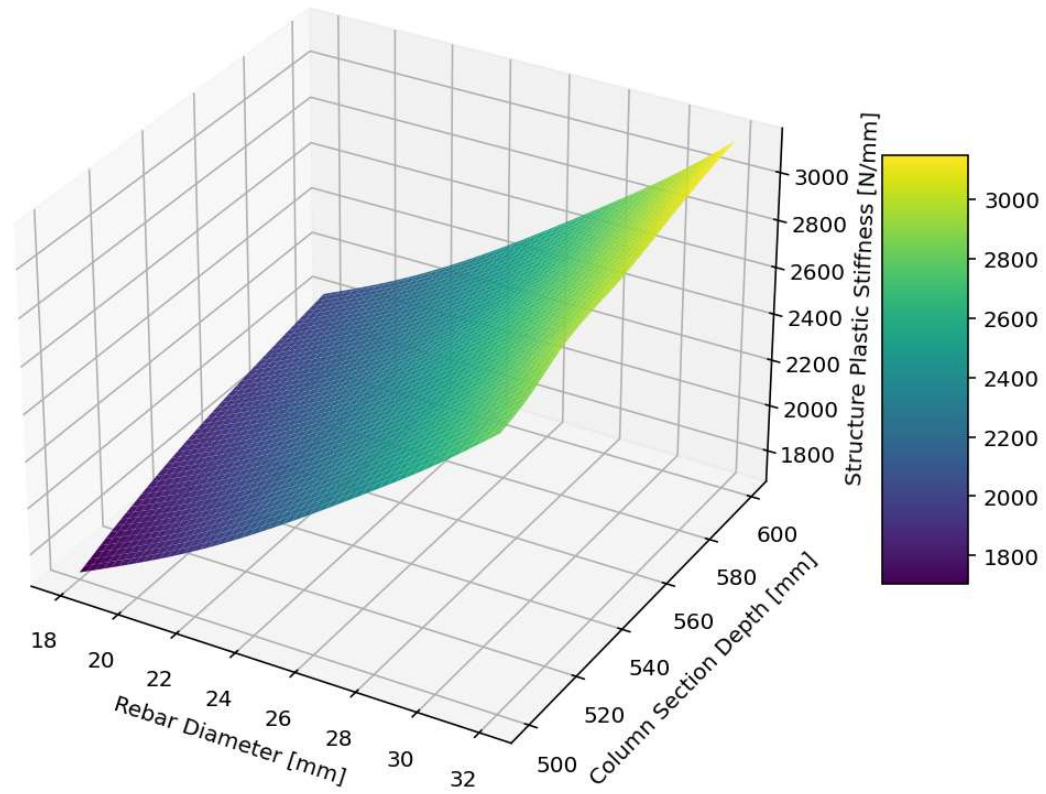
3D Contour Plot of Structure Displacement in Y Dir. [mm]



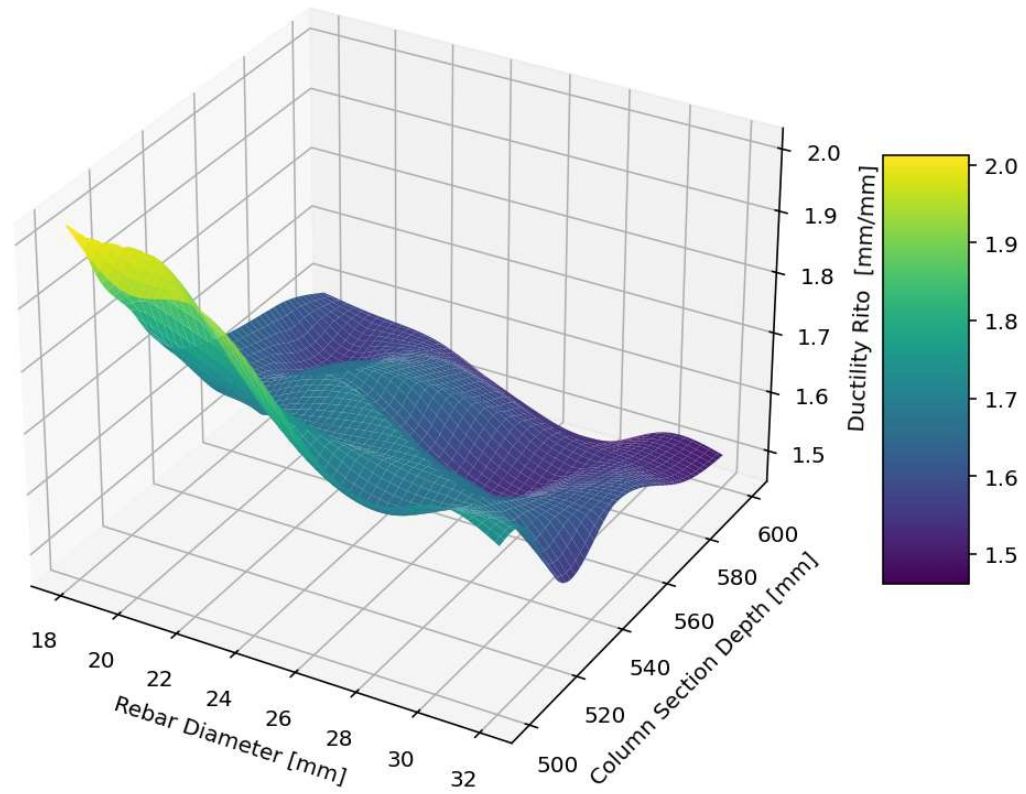
3D Contour Plot of Structure Elastic Stiffness [N/mm]



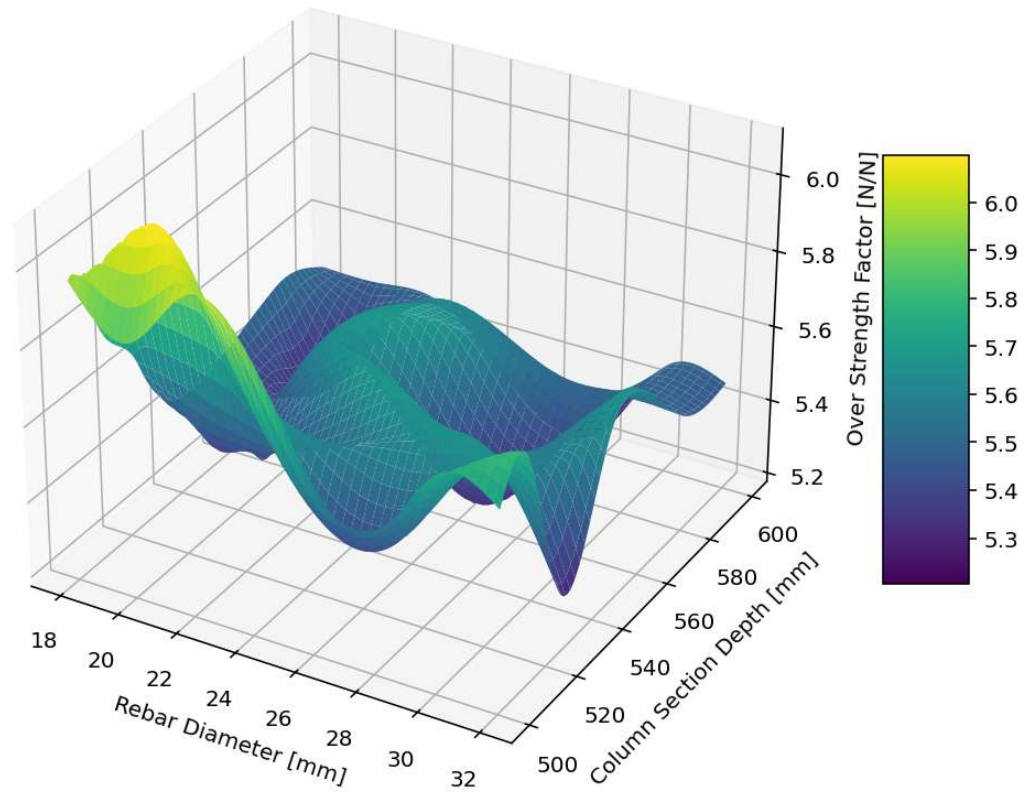
3D Contour Plot of Structure Plastic Stiffness [N/mm]



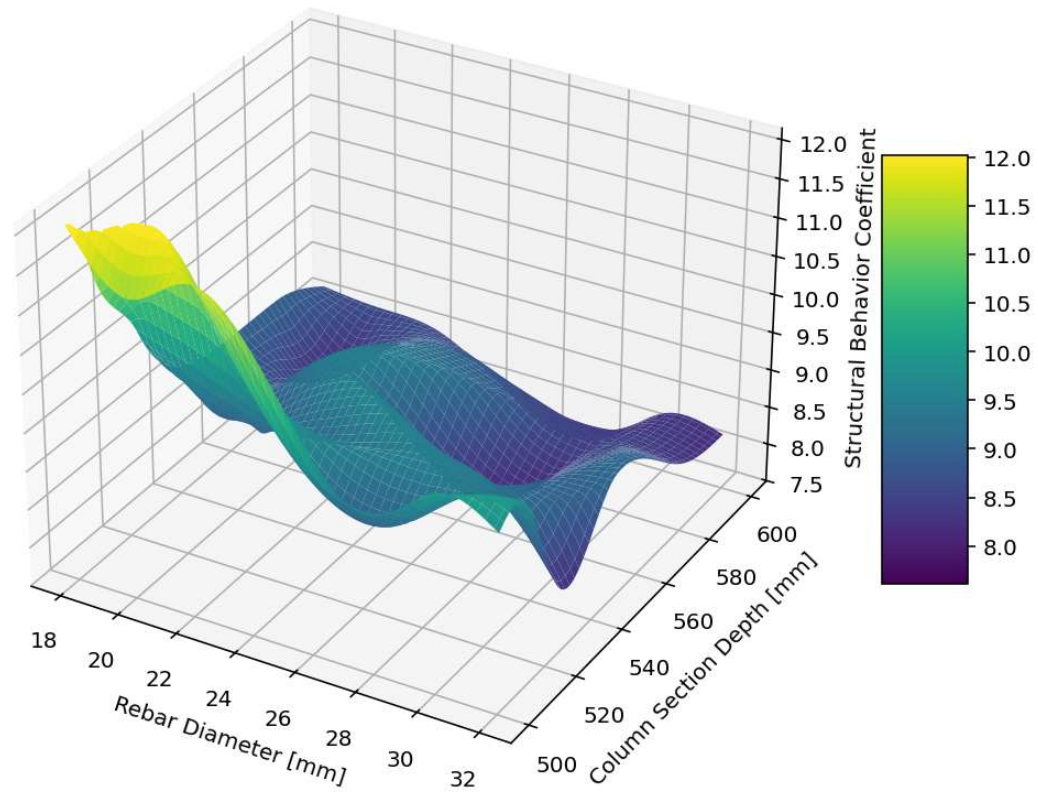
3D Contour Plot of Ductility Rito [mm/mm]

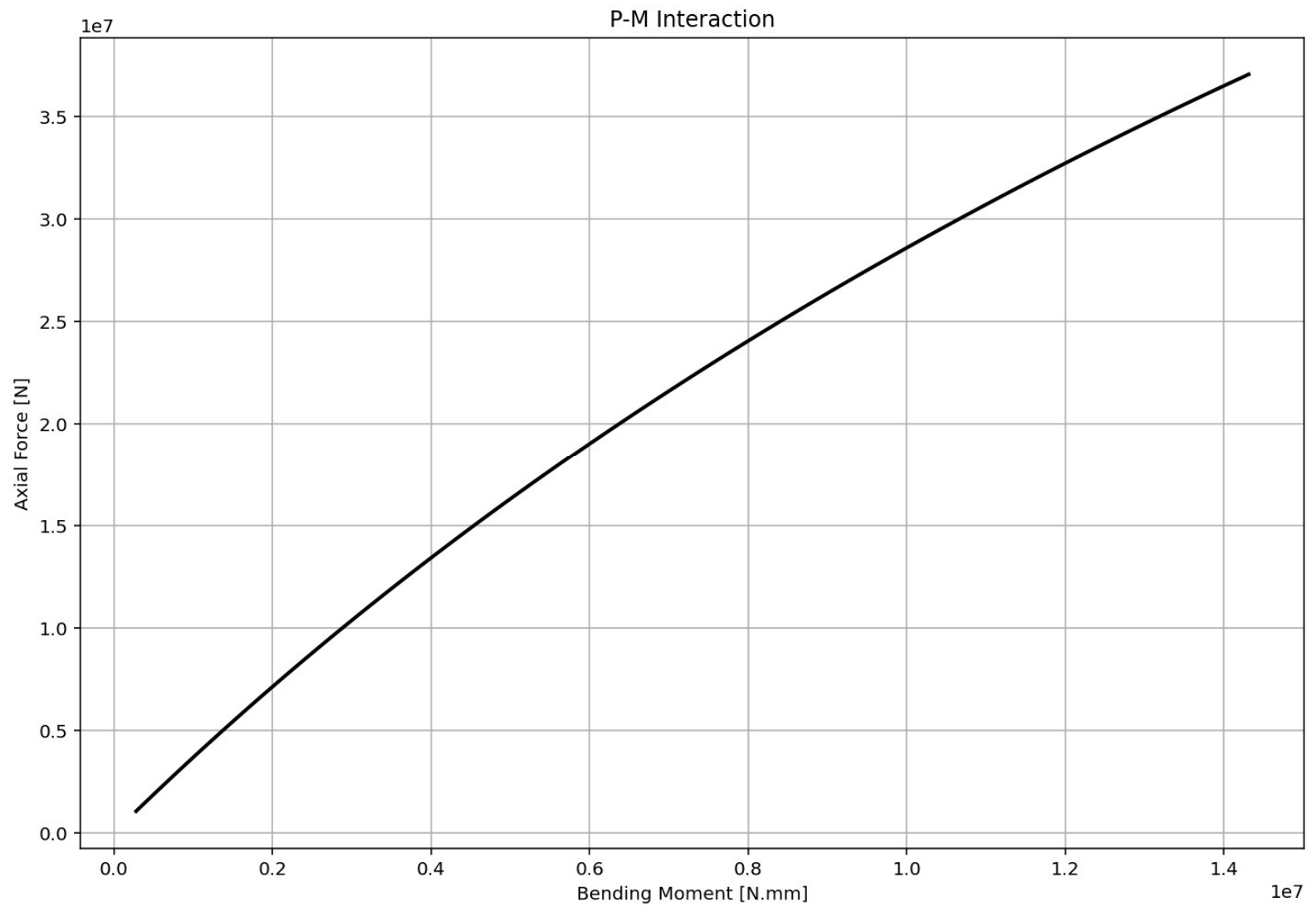


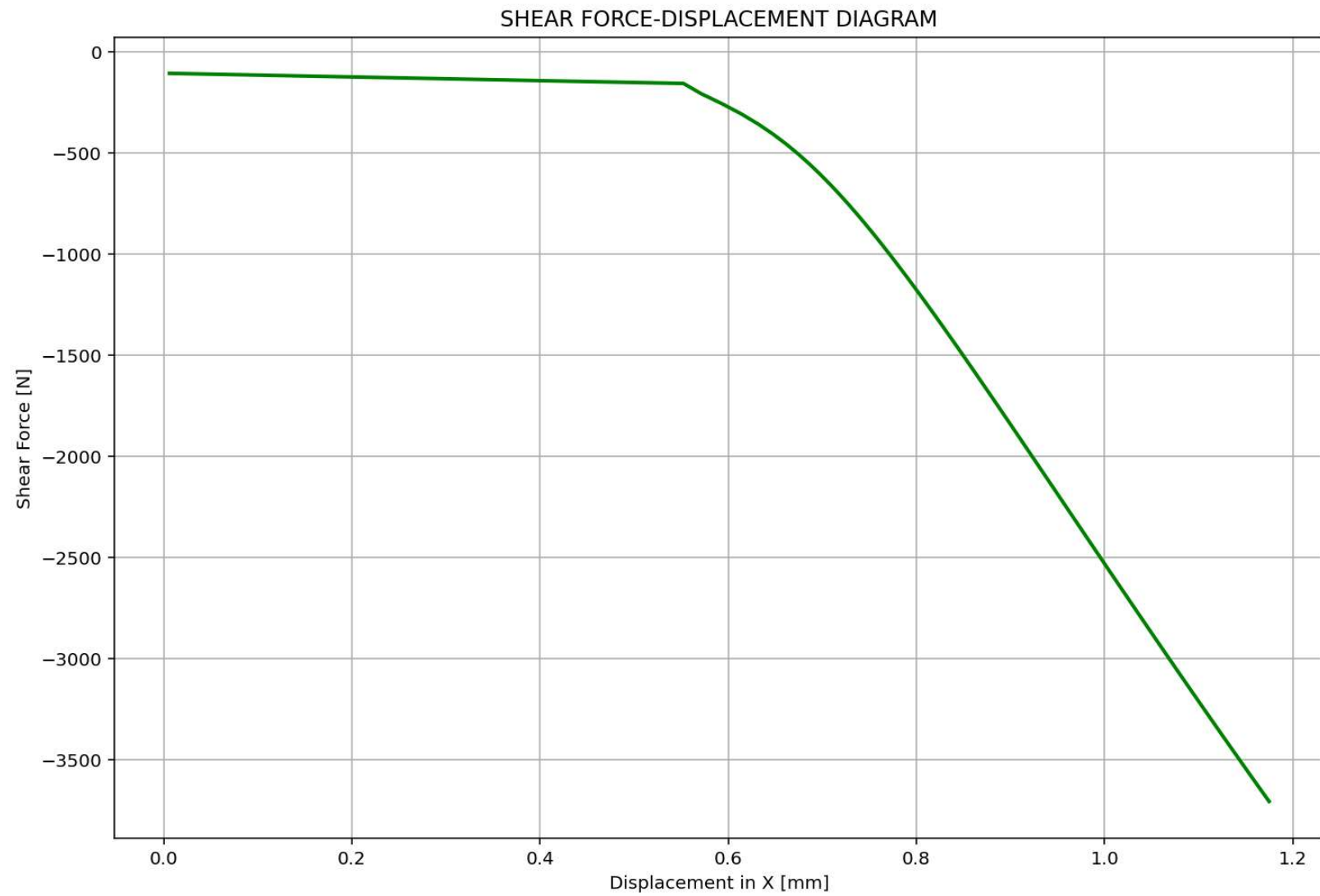
3D Contour Plot of Over Strength Factor [N/N]

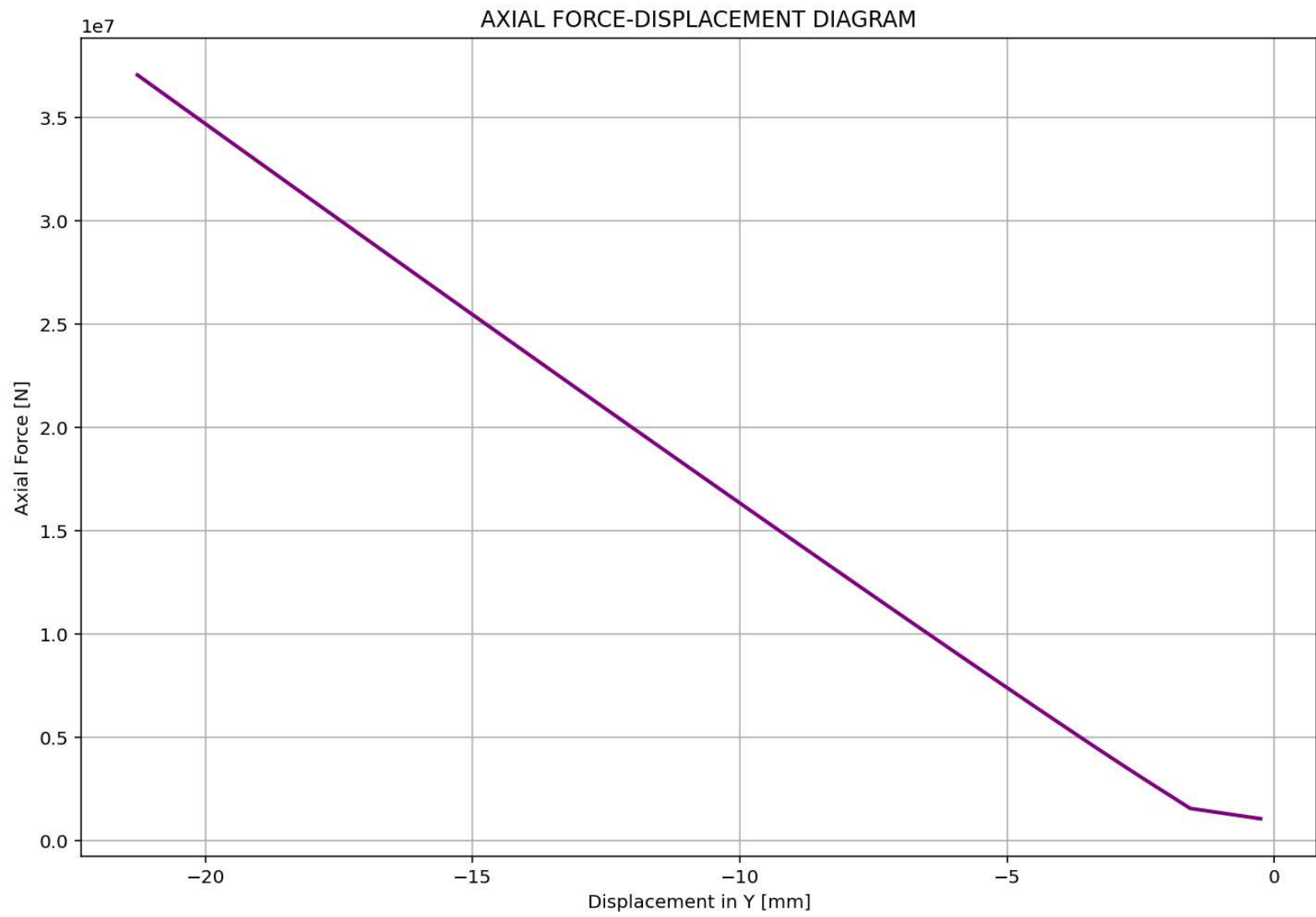


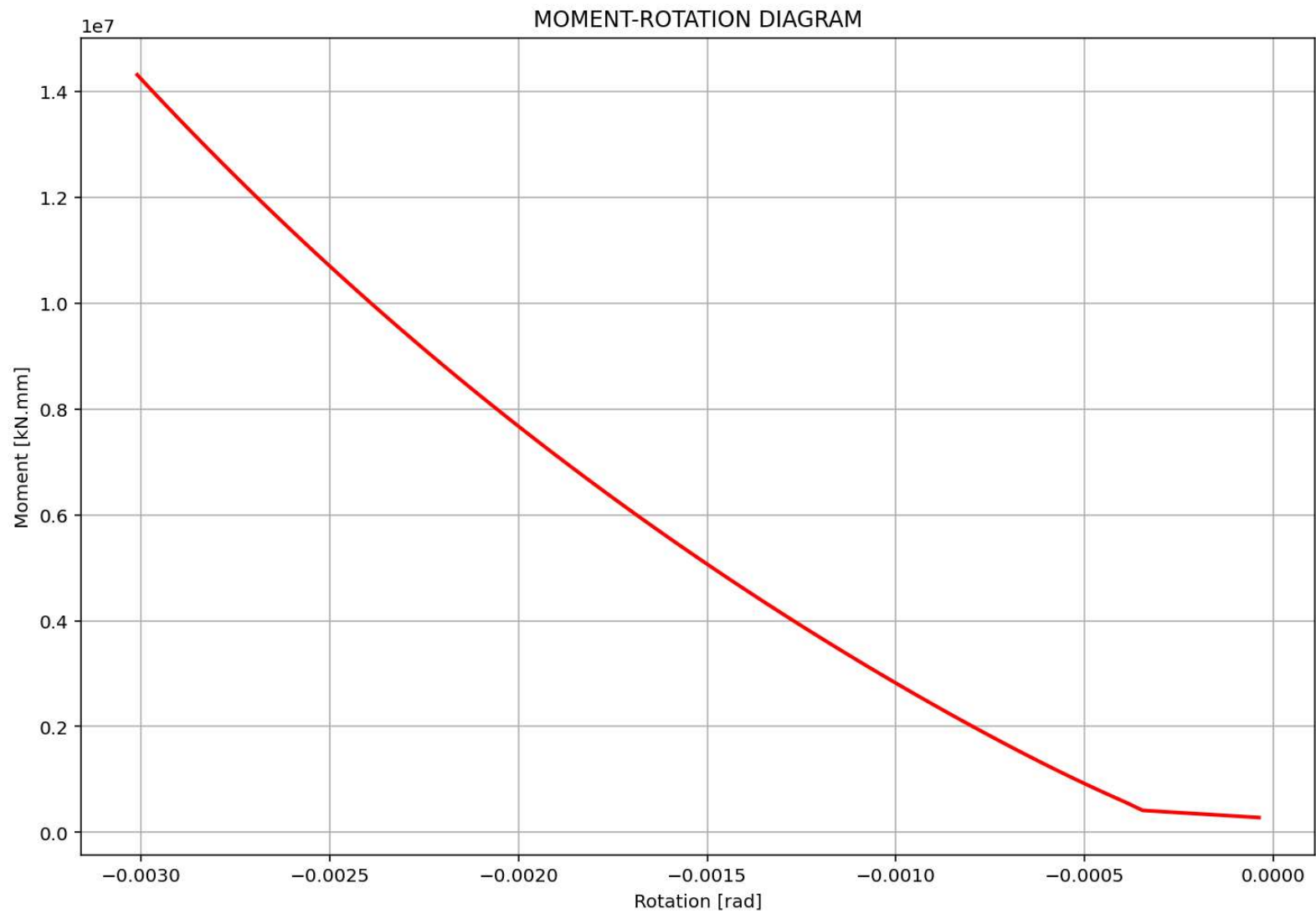
3D Contour Plot of Structural Behavior Coefficient



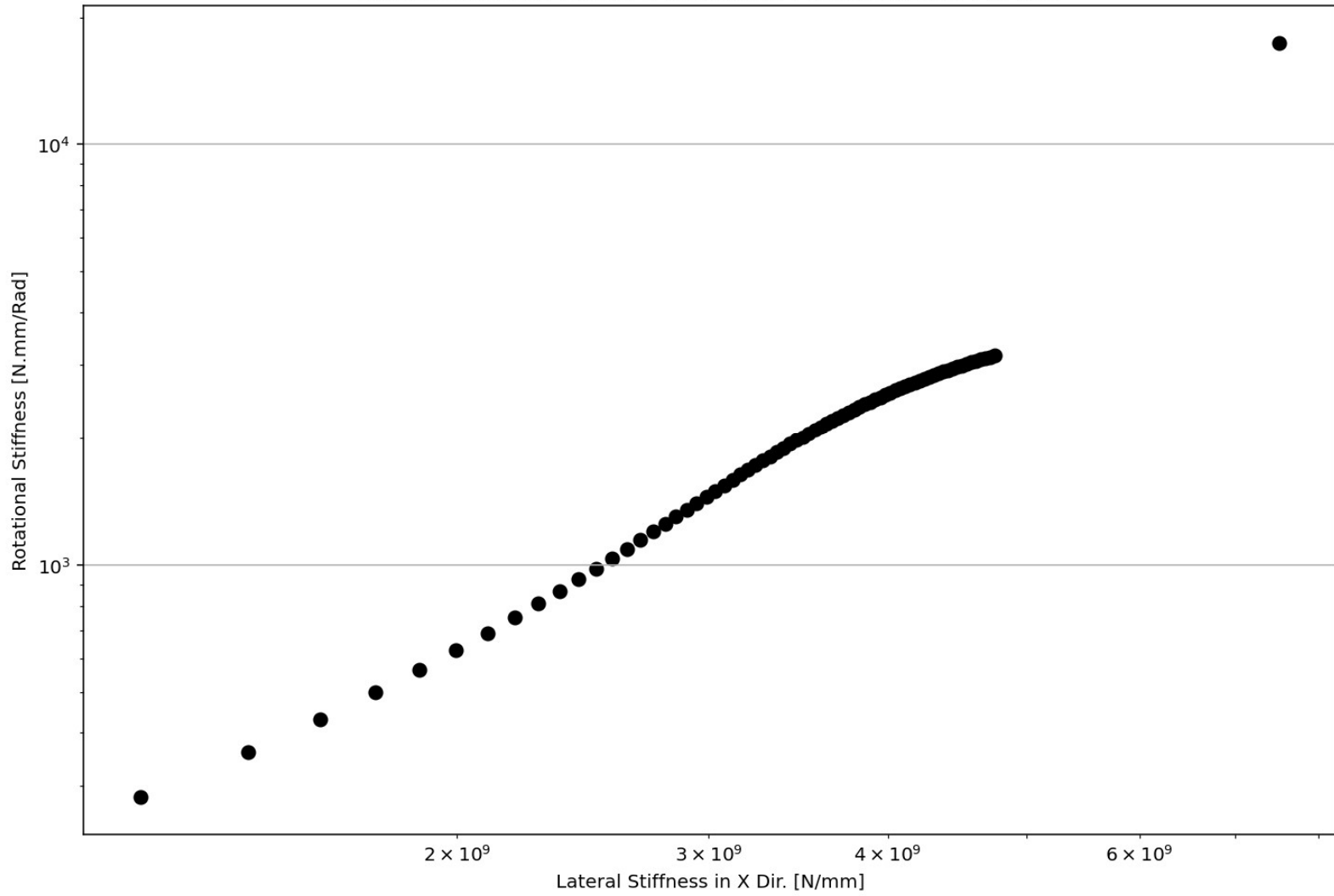




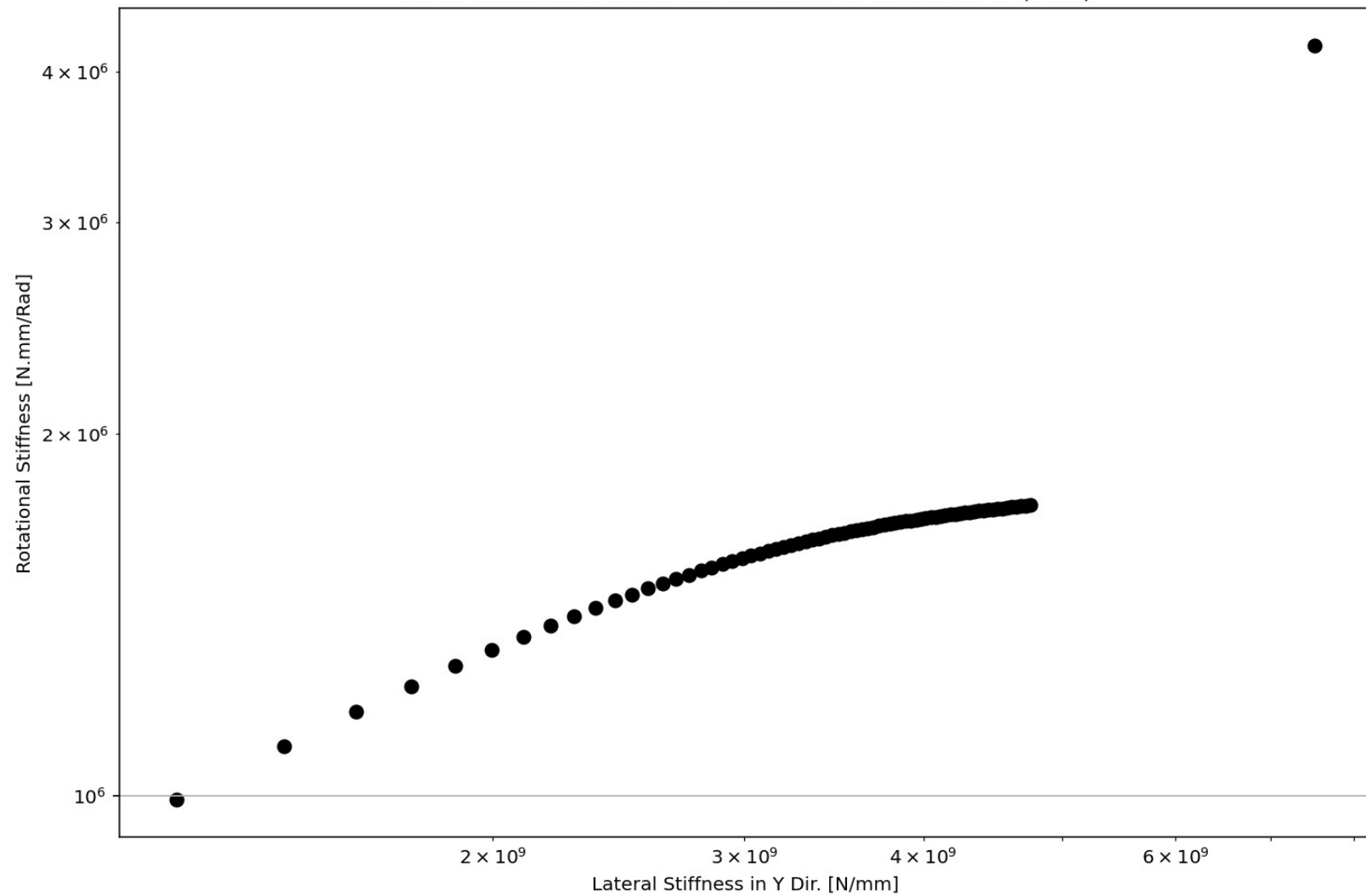


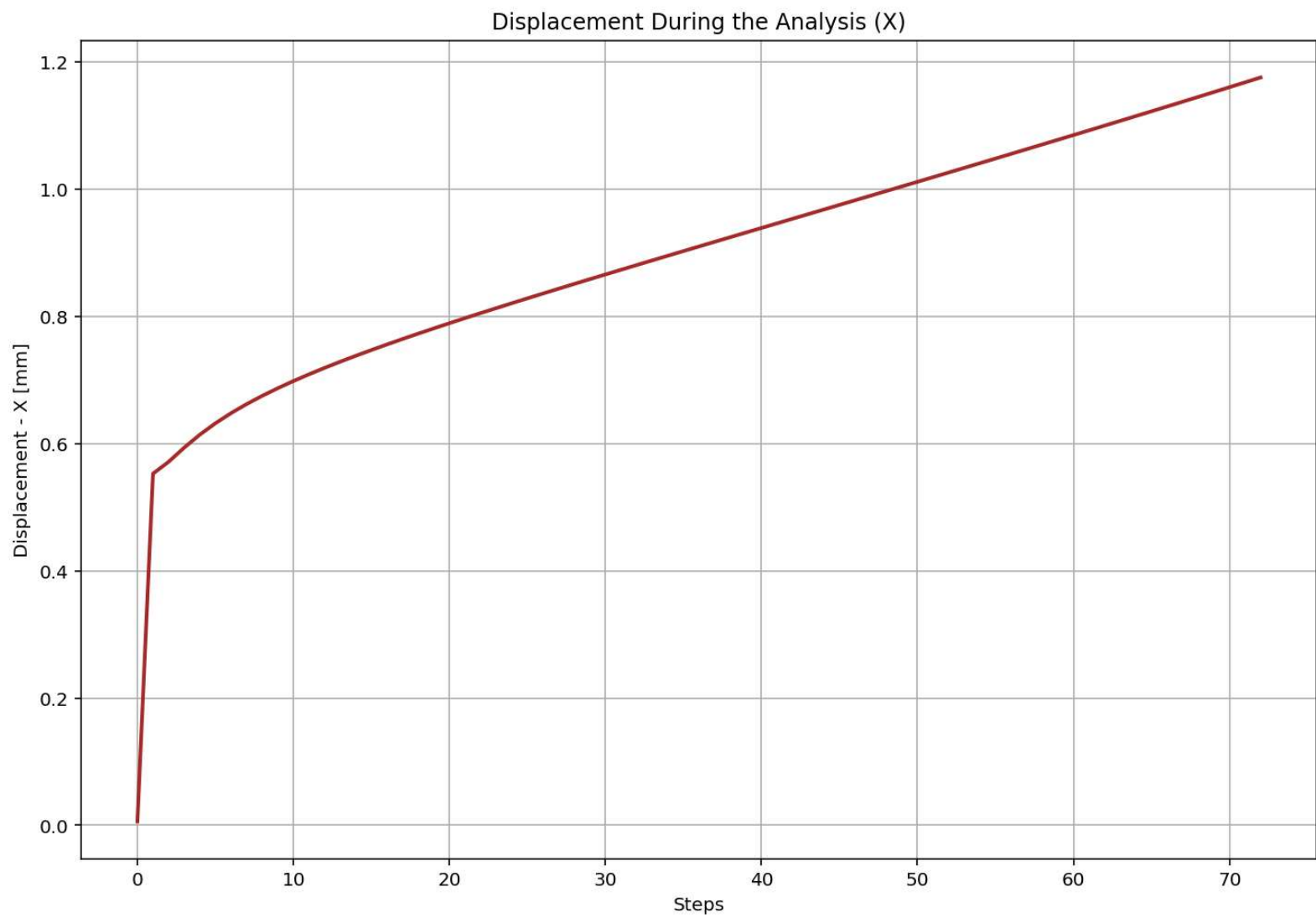


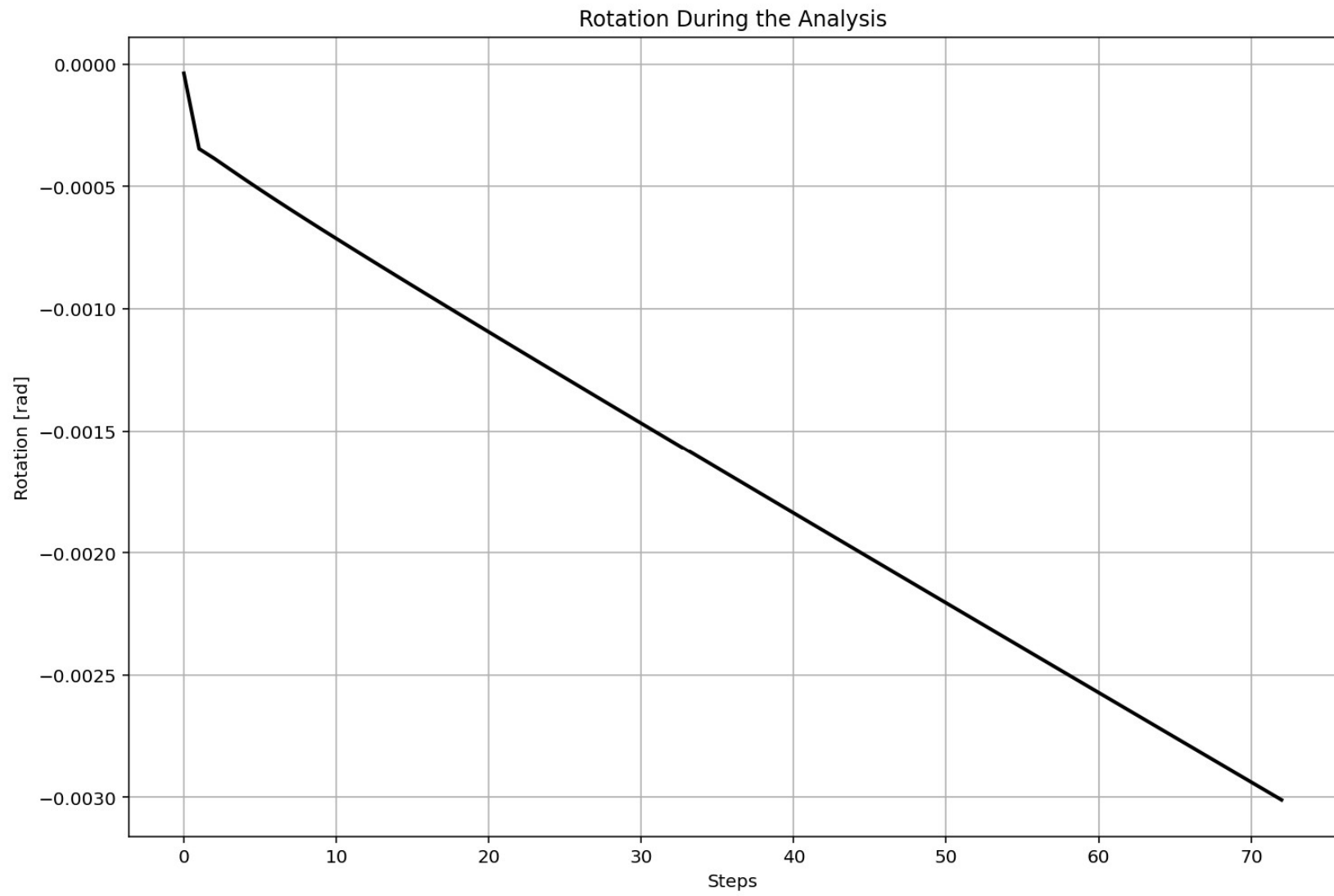
ROTATIONAL STIFFNESS-LATERAL STIFFNESS DIAGRAM (X Dir)



ROTATIONAL STIFFNESS-LATERAL STIFFNESS DIAGRAM (Y Dir)







Last Data of BaseShear-Displacement Analysis - Ductility Ratio: 1.5039 - Over Strength Factor: 5.4635

