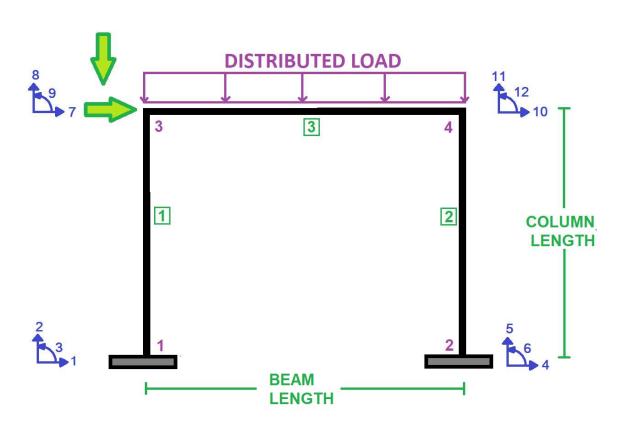
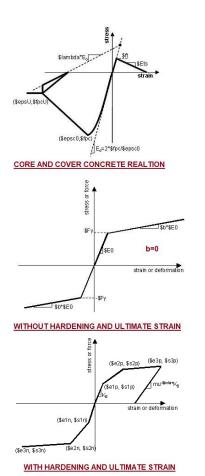
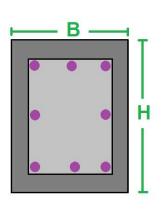
IN THE NAME OF ALLAH

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

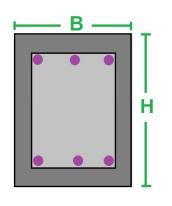
WRITTEN BY SALAR DELAVAR GHASHGHAEI (QASHQAI)



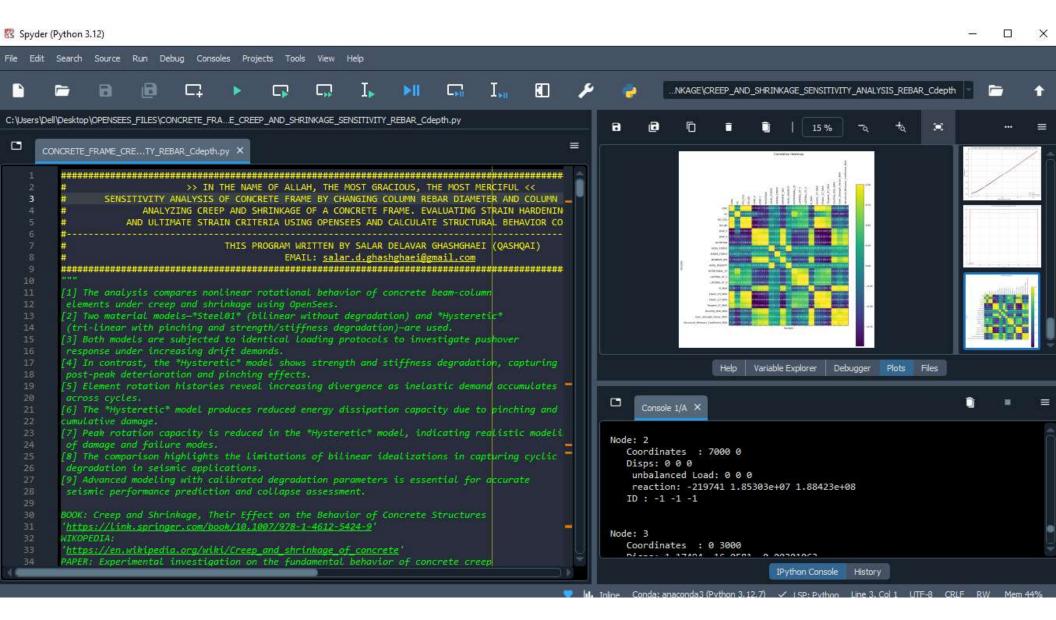


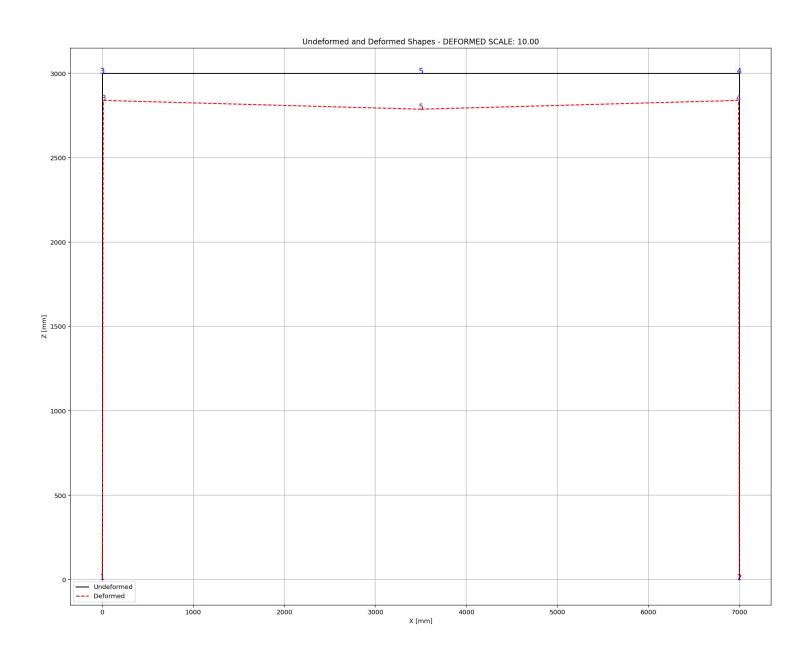


COLUMN SECTION



BEAM SECTION





AXIAL_RIGIDITY

MOMENT_WO

-0.95-0.77-0.680.03-0.23-0.720.03 0.30 0.41 0.44-0.38

DISP X -0.95-0.28-0.90-0.95 1.00 0.92 0.86 0.02 0.24 0.89 0.02-0.48-0.52-0.51 0.62-0.96-0.99-0.95 0.69 0.40 0.6

ROTATIONAL_SI

-0.160.00 - 0.28 - 0.62 - 0.72 - 0.13 - 0.03 - 0.64 - 0.13 - 0.79 - 0.46 - 0.31 - 0.77 - 0.05 - 0.26 - 0.52 - 0.80 - 0.68 - 0.77 - 0.46 - 0.31 - 0.77 - 0.05 - 0.26 - 0.52 - 0.80 - 0.68 - 0.77 - 0.46 - 0.31 - 0.77 - 0.05 - 0.26 - 0.52 - 0.80 - 0.68 - 0.77 - 0.46 - 0.31 - 0.77 - 0.05 - 0.26 - 0.52 - 0.80 - 0.68 - 0.77 - 0.46 - 0.31 - 0.77 - 0.47 - 0.

<mark>).98 1.00</mark>-0.95-0.77-0.670.05-0.23-0.710.05 0.31 0.41 0.44-0.38<mark>1.00 0.96</mark> 0.84-0.45-0.17-0.38

-0.16<mark>1.00 0.98</mark>-0.90-0.67-0.560.07-0.24-0.610.07 0.17 0.34 0.39-0.26<mark>0.97 0.91</mark> 0.74-0.33-0.07-0.26

SHEAR_FORCE

AXIAL_FORCE

ROTATION

RO BE

DISP Y -- 0.77-0.62-0.67-0.77 0.92 1.00 0.99

ROTATION --0.68-0.72-0.56-0.67 0.86 0.99 1.00

AXIAL FORCE -0.03-0.130.07 0.05 0.02 0.06 0.08

DIAC

RO COL-

RO BE -

Hc -

Structural_Behavior_Coefficient_MAX

Over_Strength_Factor_MAX

Ductility_Rito_MAX

Tangent_ST_MAX

Plastic_ST_MAX

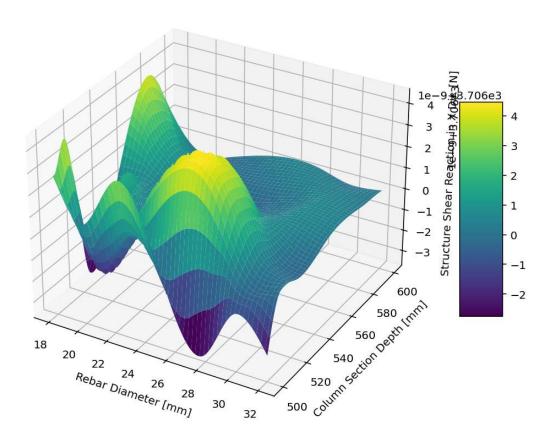
Elastic_ST_MAX

ATERAL ST X

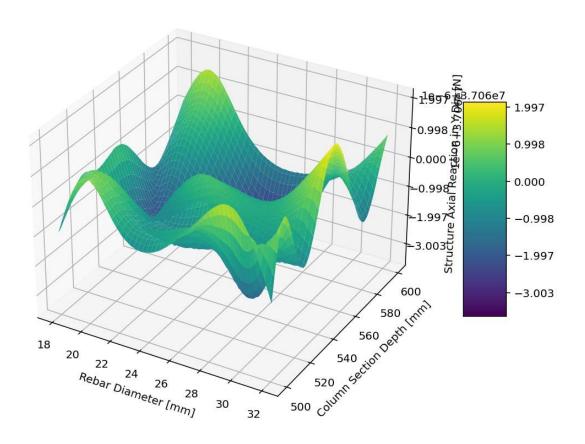
0.06 0.21 0.98 0.06-0.71-0.61-0.540.81-0.80-0.91-0.980.88 0.59 0.8

ATERAL ST.

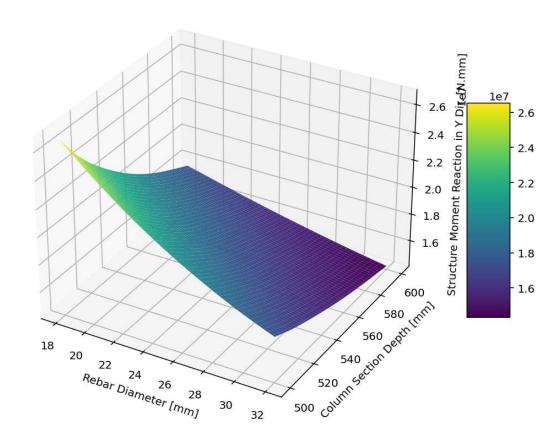
3D Contour Plot of Structure Shear Reaction in X Dir. [N]



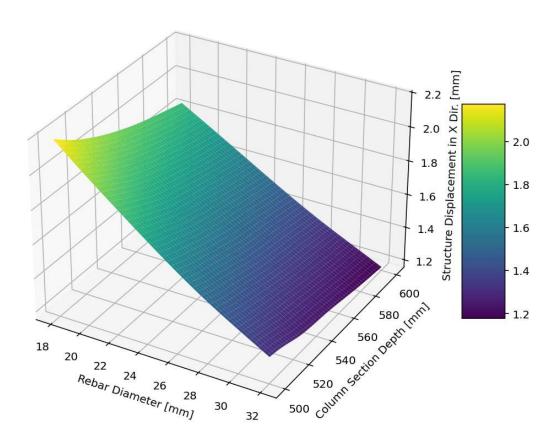
3D Contour Plot of Structure Axial Reaction in Y Dir. [N]



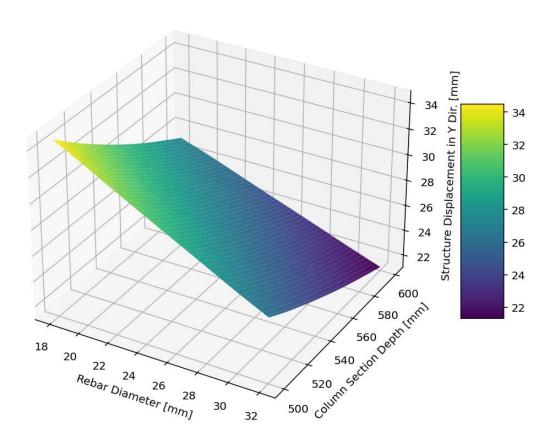
3D Contour Plot of Structure Moment Reaction in Y Dir. [N.mm]



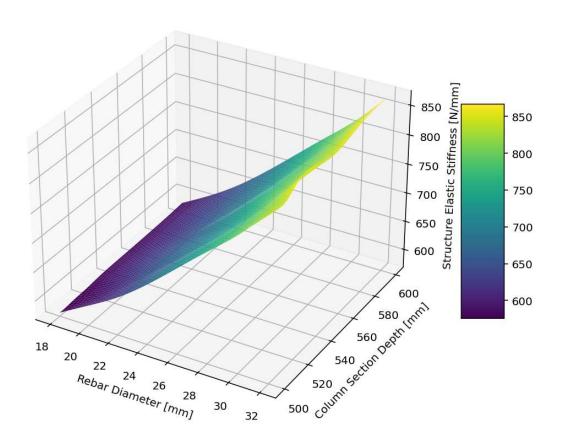
3D Contour Plot of Structure Displacement in X Dir. [mm]



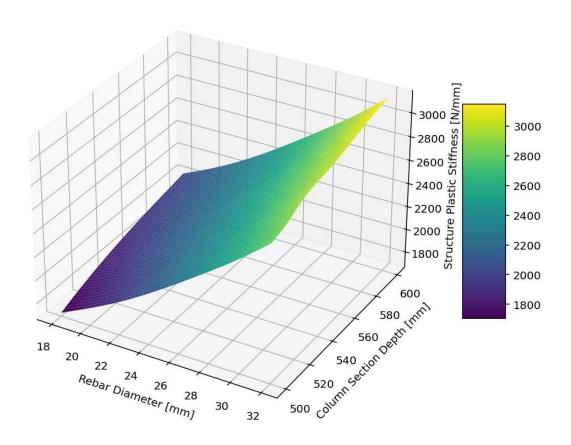
3D Contour Plot of Structure Displacement in Y Dir. [mm]



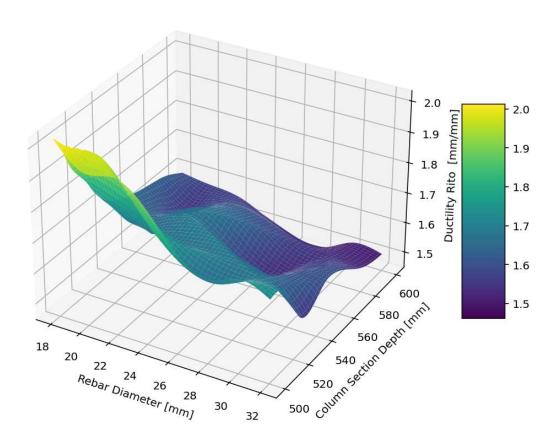
3D Contour Plot of Structure Elastic Stiffness [N/mm]



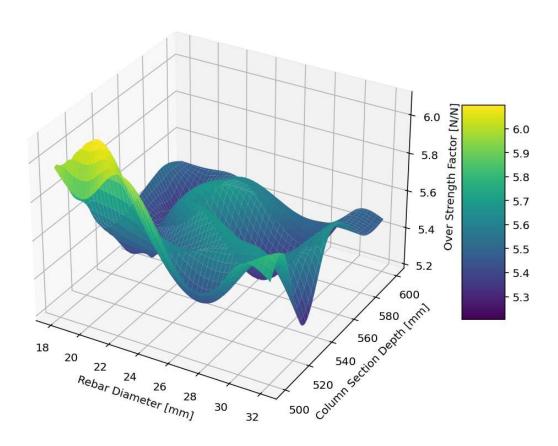
3D Contour Plot of Structure Plastic Stiffness [N/mm]



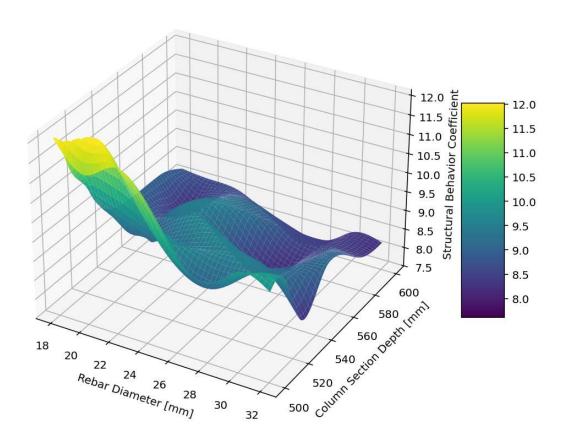
3D Contour Plot of Ductility Rito [mm/mm]

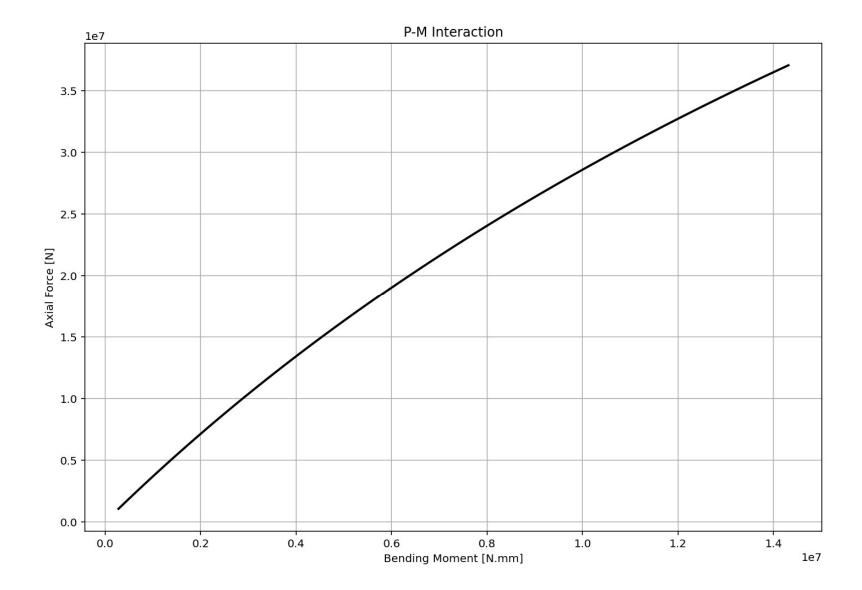


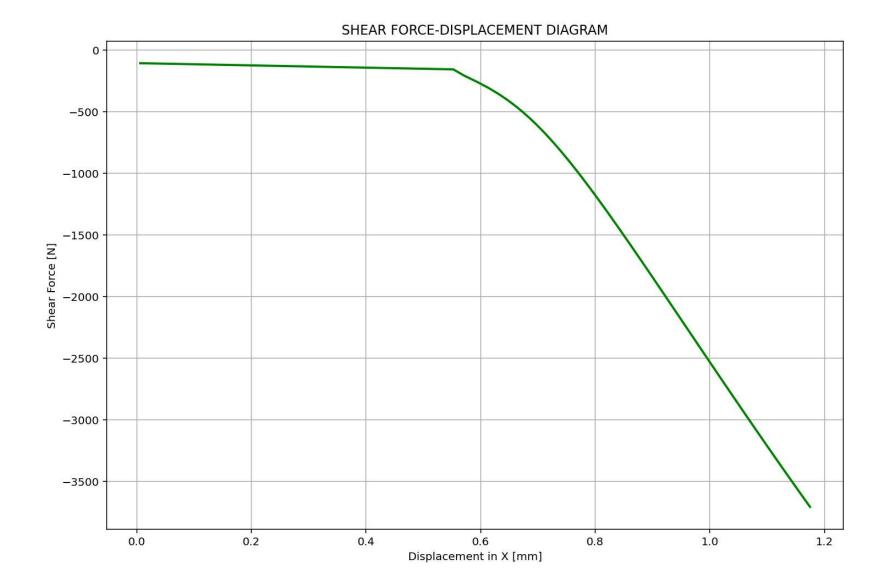
3D Contour Plot of Over Strength Factor [N/N]

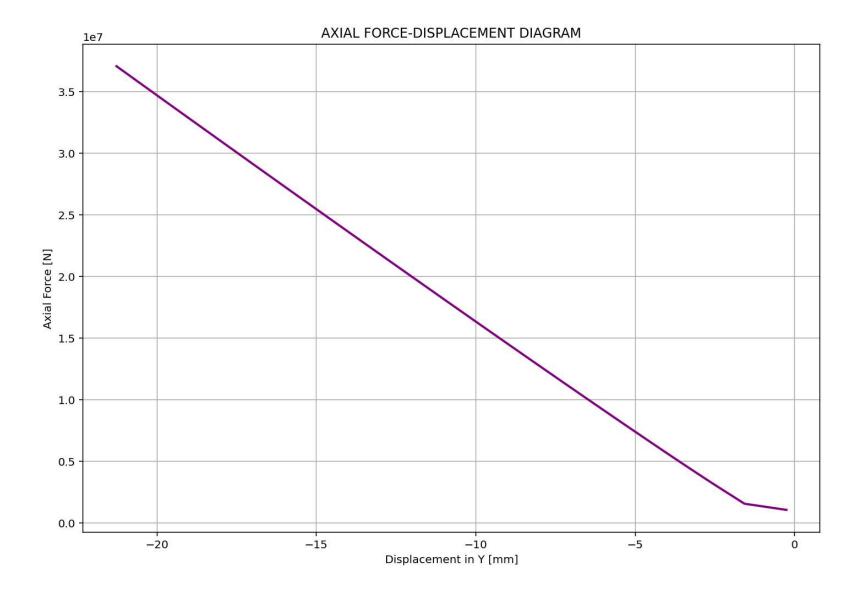


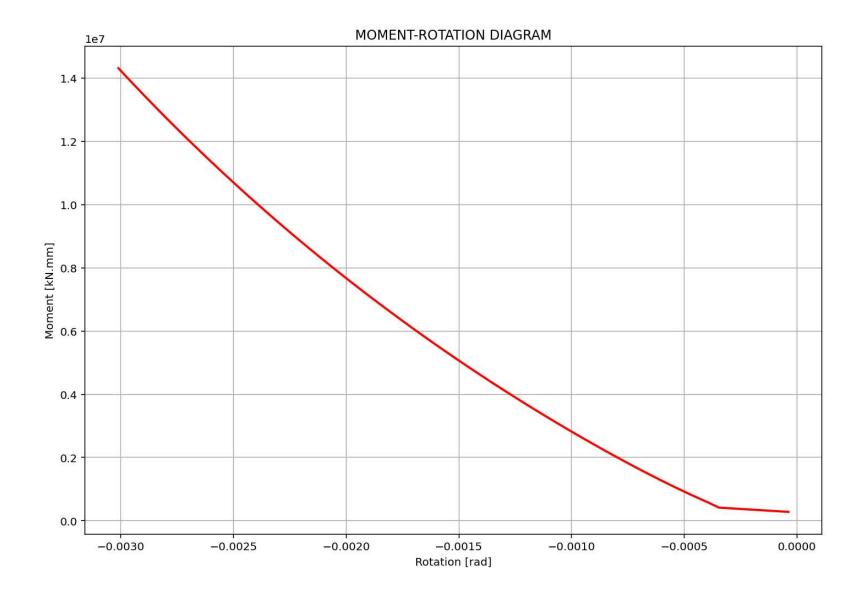
3D Contour Plot of Structural Behavior Coefficient



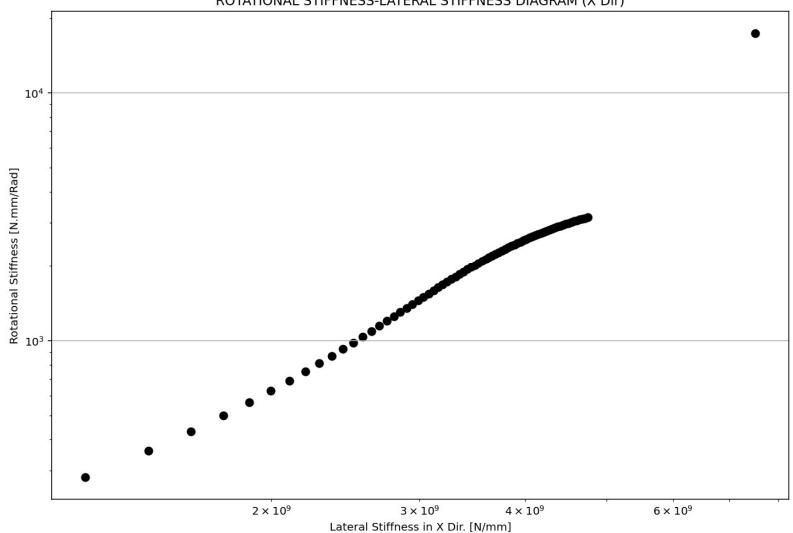








ROTATIONAL STIFFNESS-LATERAL STIFFNESS DIAGRAM (X Dir)



ROTATIONAL STIFFNESS-LATERAL STIFFNESS DIAGRAM (Y Dir)

