SimOps Structural Report

Component: Cube

Date: 2025-12-28 19:25

<div style="text-align:right">**PASSED**</div>

Analysis Metrics

Strategy:	Default
Load Case:	1.0G Z-Load
Max Von Mises Stress:	5.6132E-03 MPa
Max Displacement:	2.96 µm
Safety Factor:	49170.08
Elements:	1,161
Nodes:	2,120

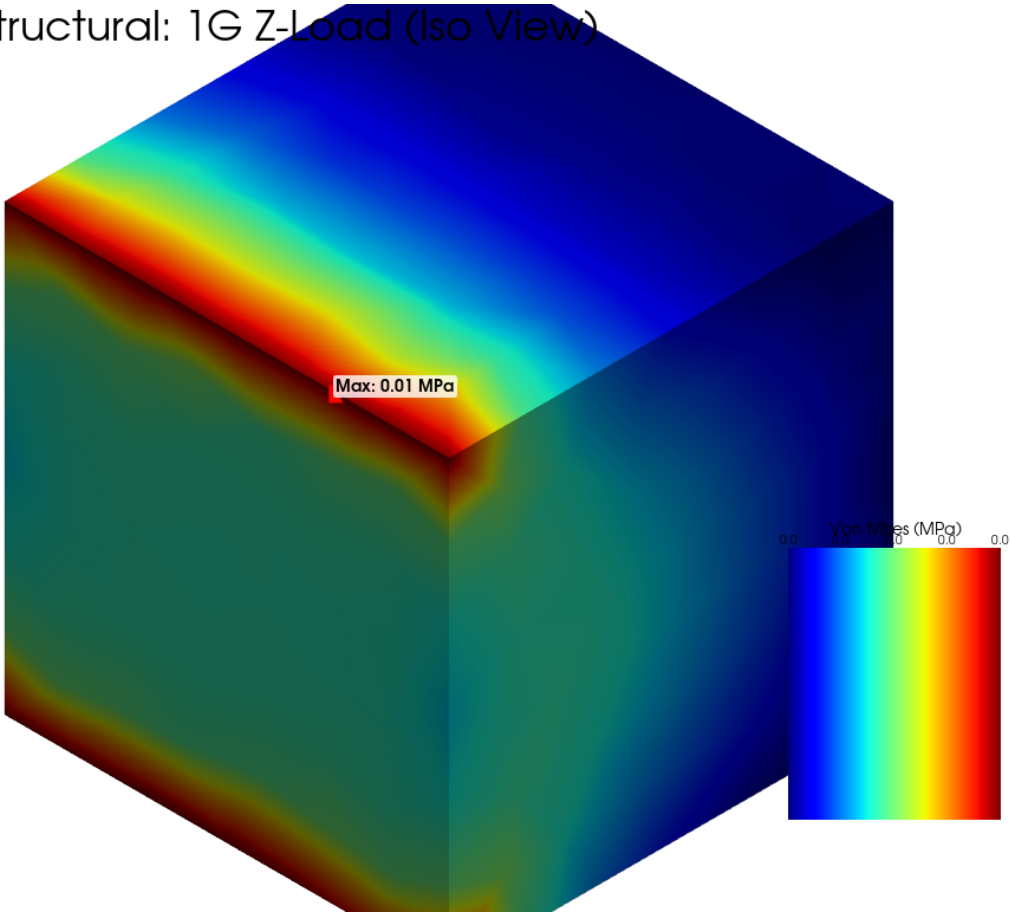## Physics Validation

Stress Margin:	✓ PASS (0.01 < 184.0 MPa)
Displacement:	✓ PASS (2.96 µm < 50.00 µm)

Material: Al6061-T6
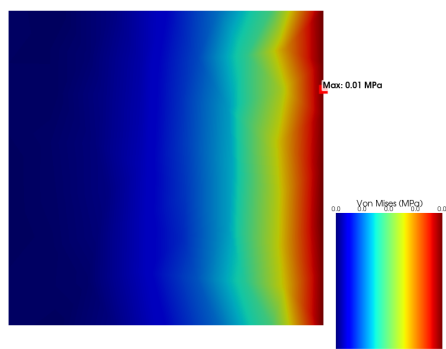
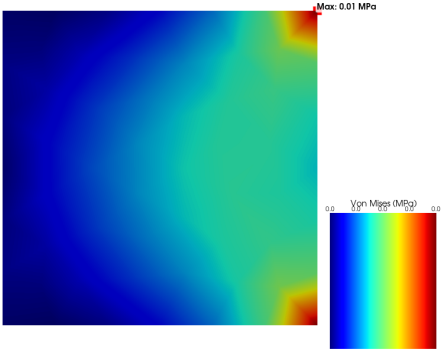Yield Strength: 276 MPa

Static Structural: 1G Z-Load (Iso View)

St

Max: 0.01 MPa

Von Mises (MPa)

Additional Views

Top
Static Structural: 1G Z-Load (Top View)

Max: 0.01 MPa

Von Mises (MPa)

Front
Static Structural: 1G Z-Load (Front View)

Max: 0.01 MPa

Von Mises (MPa)

Side
Static Structural: 1G Z-Load (Side View)

Max: 0.01 MPa

Von Mises (MPa)