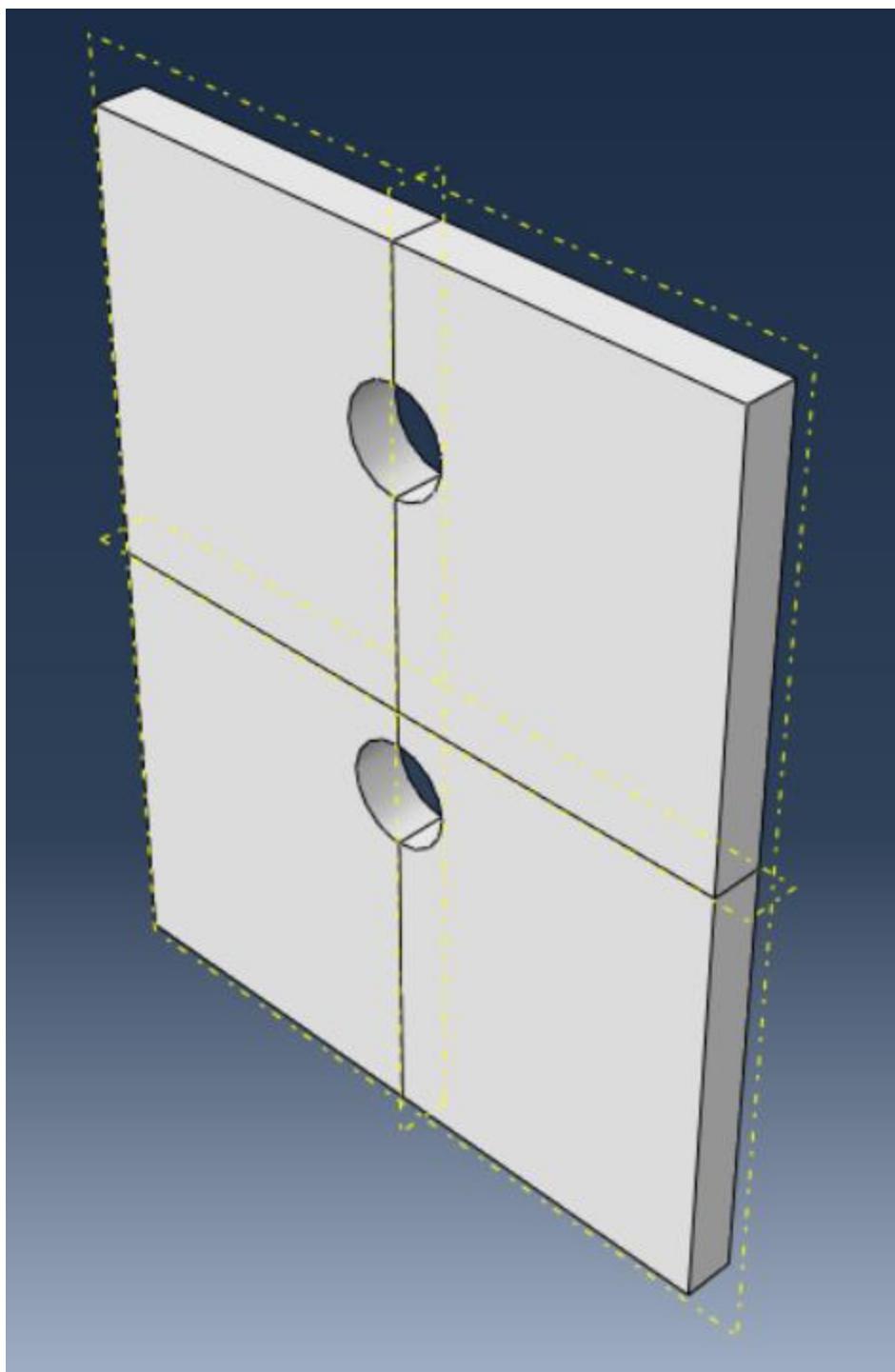


Project 25: ABAQUS: Deformation of a Plate with Multiple Holes

Problem Statement: Calculate deformation and stress of plate with multiple holes.

Geometry:



Material Properties:

- Material Behaviors

Elastic

General Mechanical Thermal Electrical/Magnetic Other

- Elastic

Type: Isotropic

Use temperature-dependent data

Number of field variables:

Moduli time scale (for viscoelasticity): Long-term

No compression

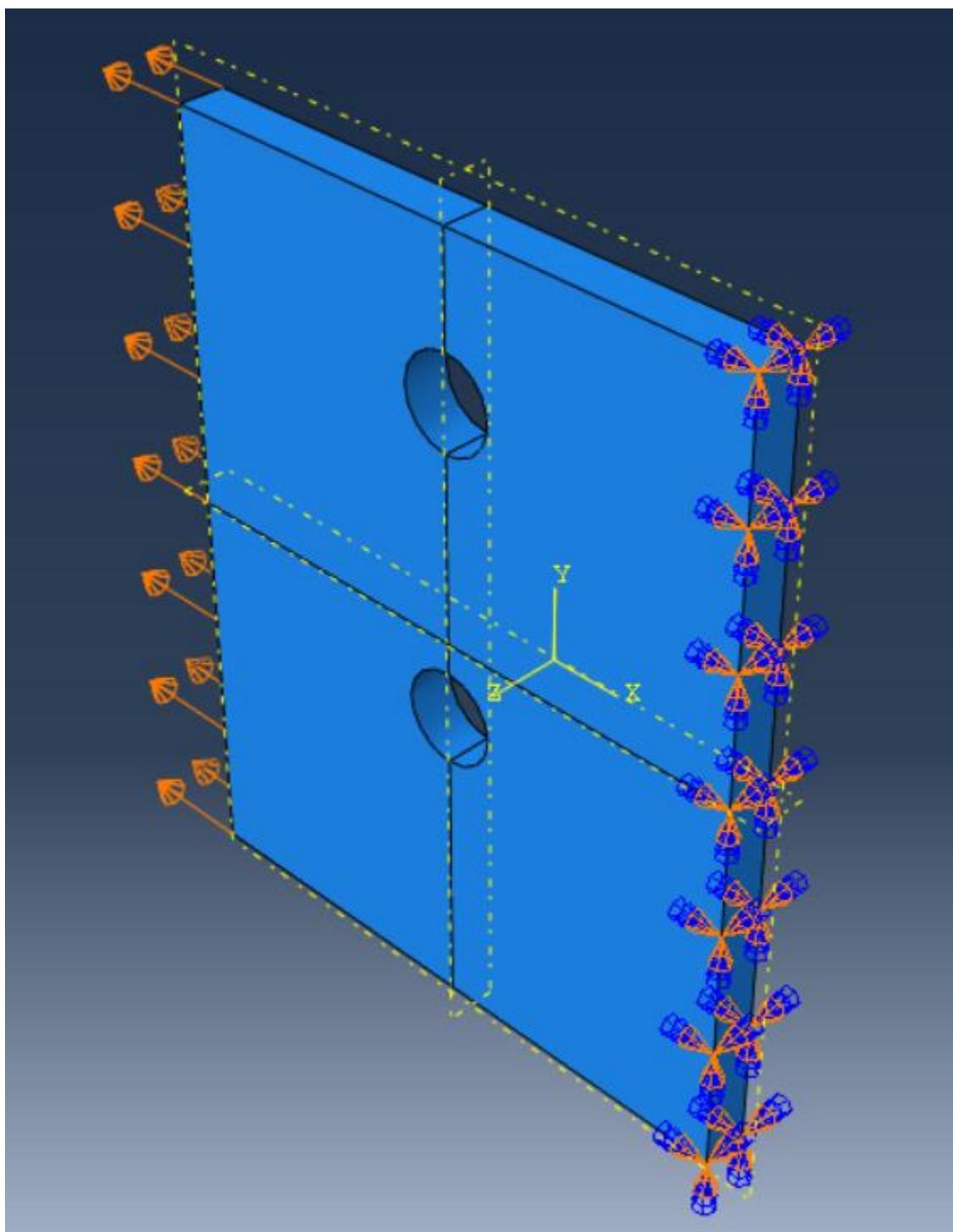
No tension

Data

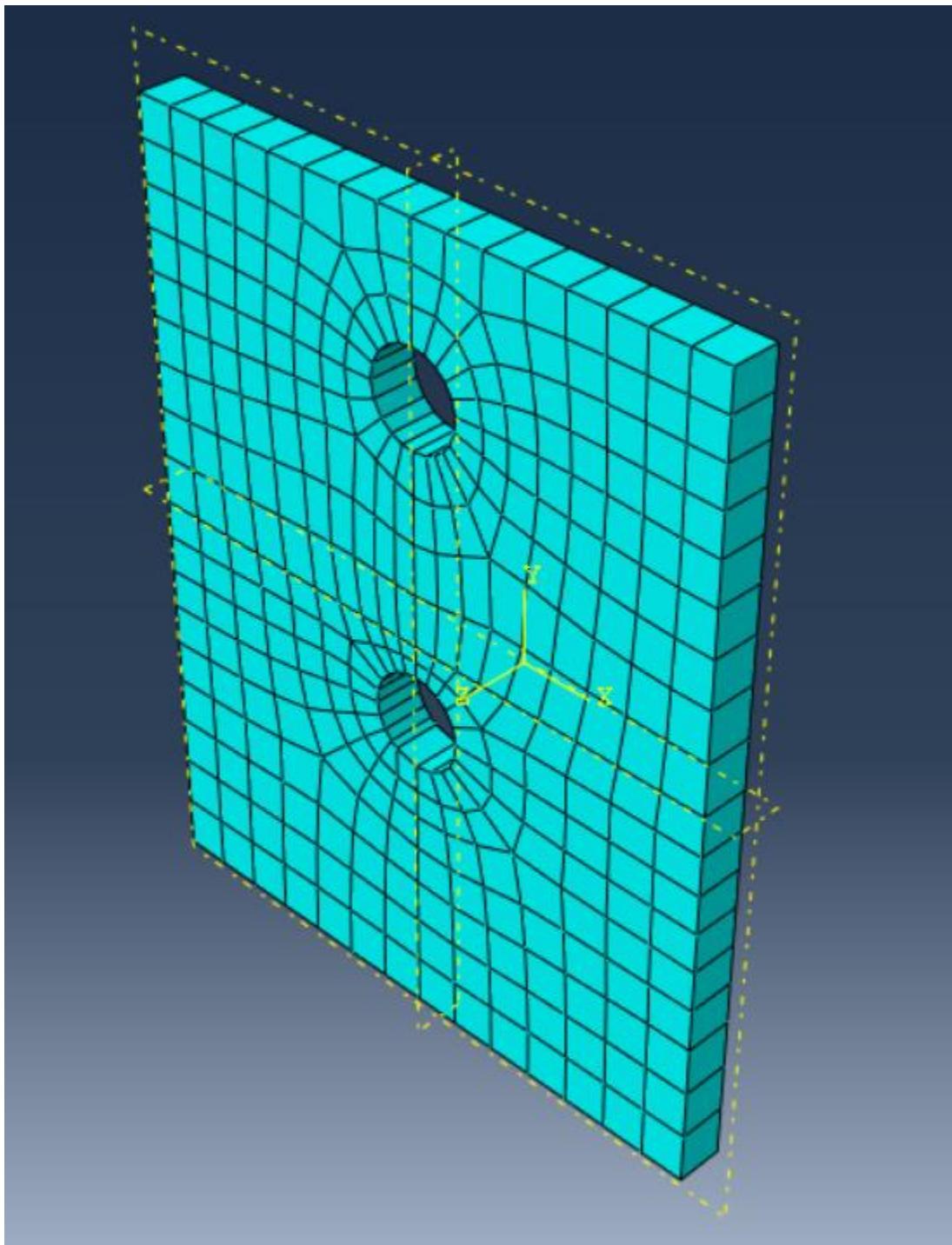
	Young's Modulus	Poisson's Ratio
1	210000	0.3

Loading and boundary conditions:

- 1) Right edge is fixed.
- 2) Left edge has a displacement applied.

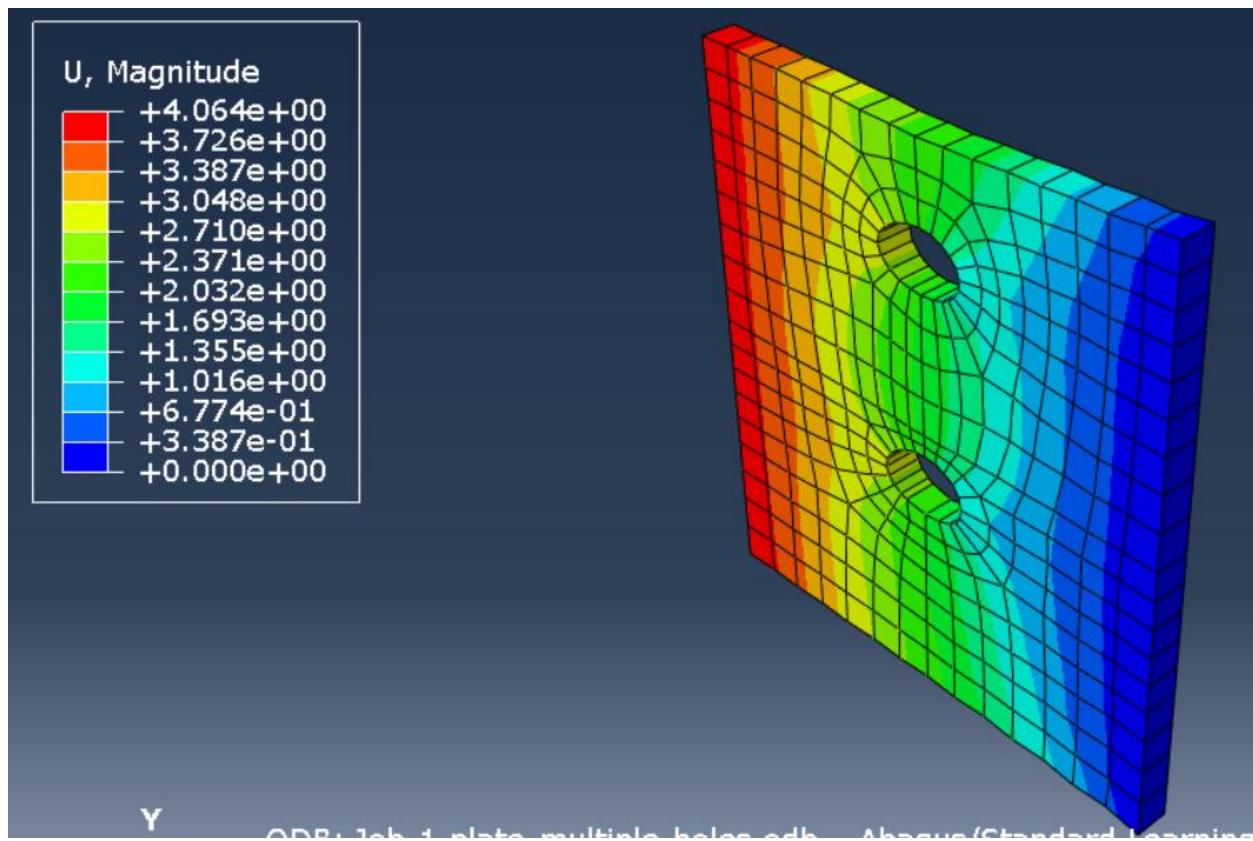


Mesh: (coarse due to limitation of 1000 nodes in ABAQUS educational version).



Results:

Deformation:



Mises Stress:

