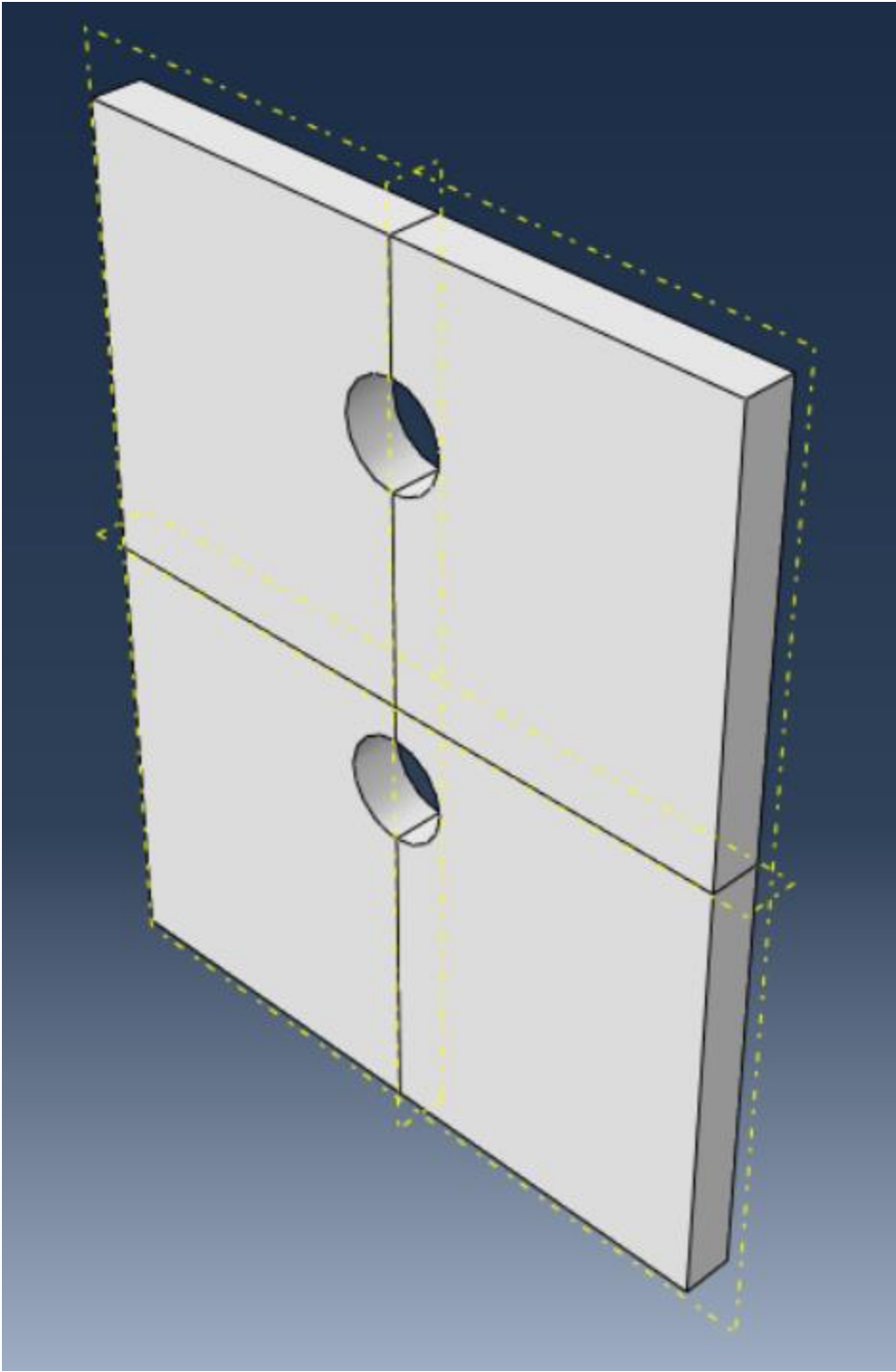


## Project 25: ABAQUS: Deformation of a Plate with Multiple Holes

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: 

0

Moduli time scale (for viscoelasticity): 

Long-term

☐ No compression

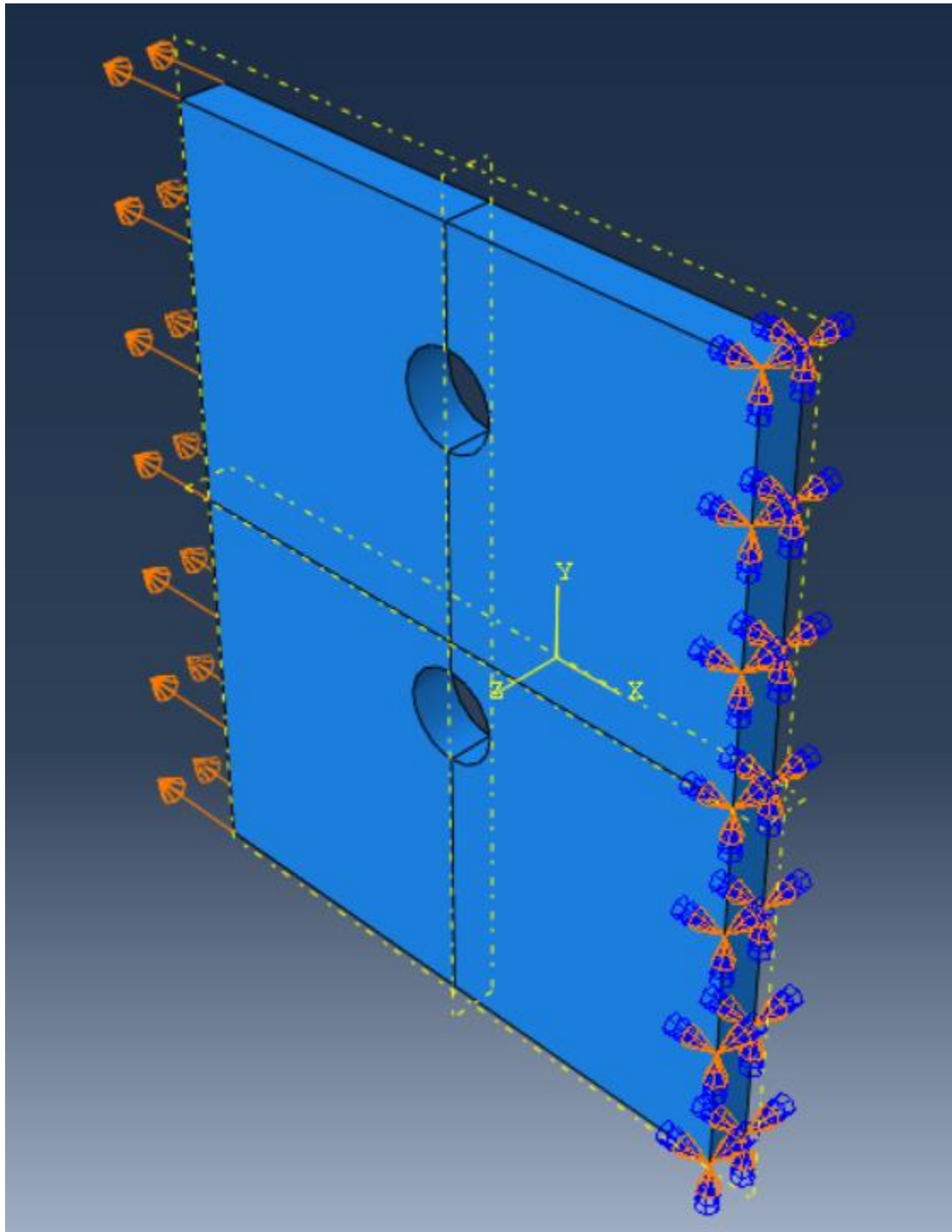
☐ No tension

Data

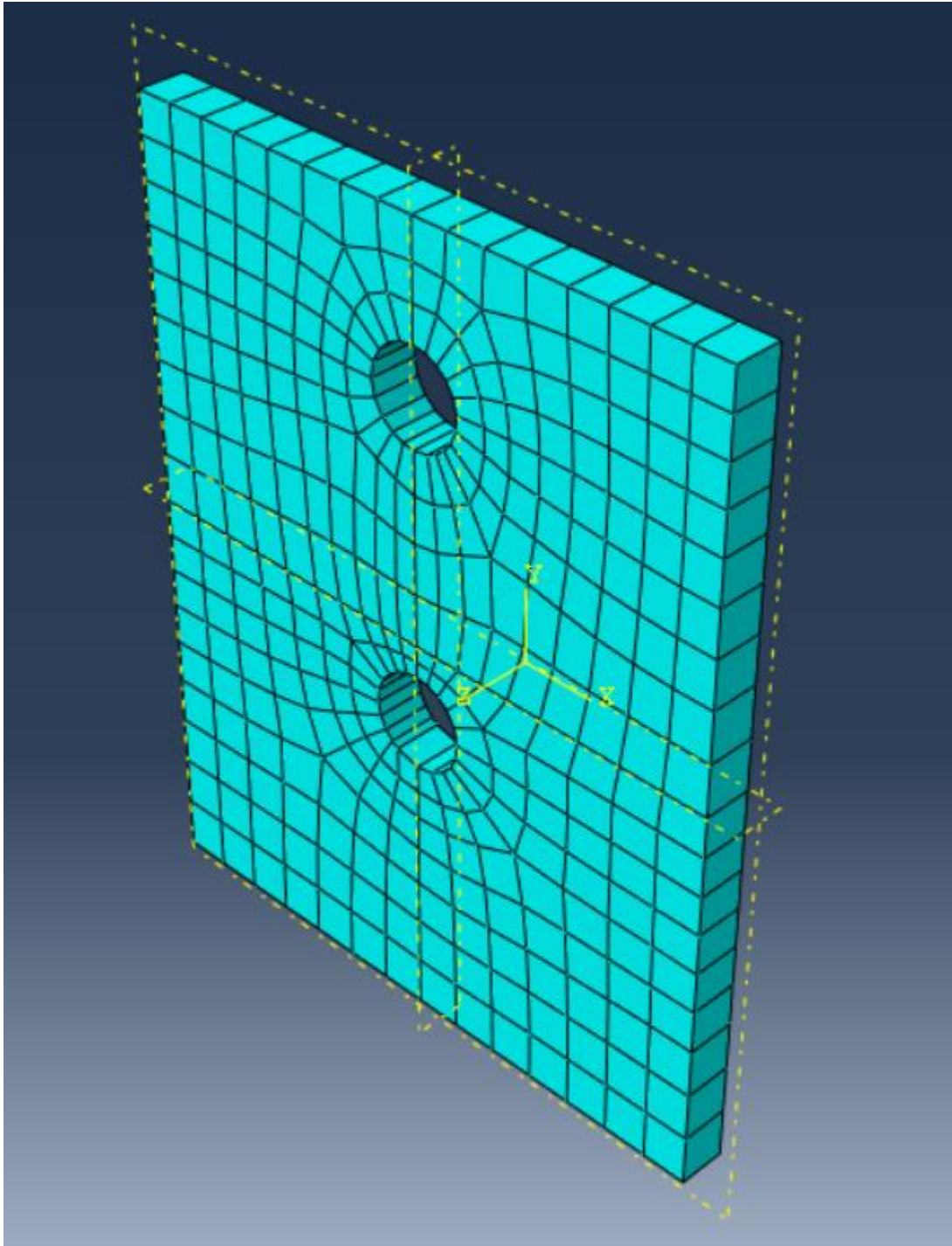
	Young's Modulus	Poisson's Ratio
1	210000	0.3

Loading and boundary conditions:

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

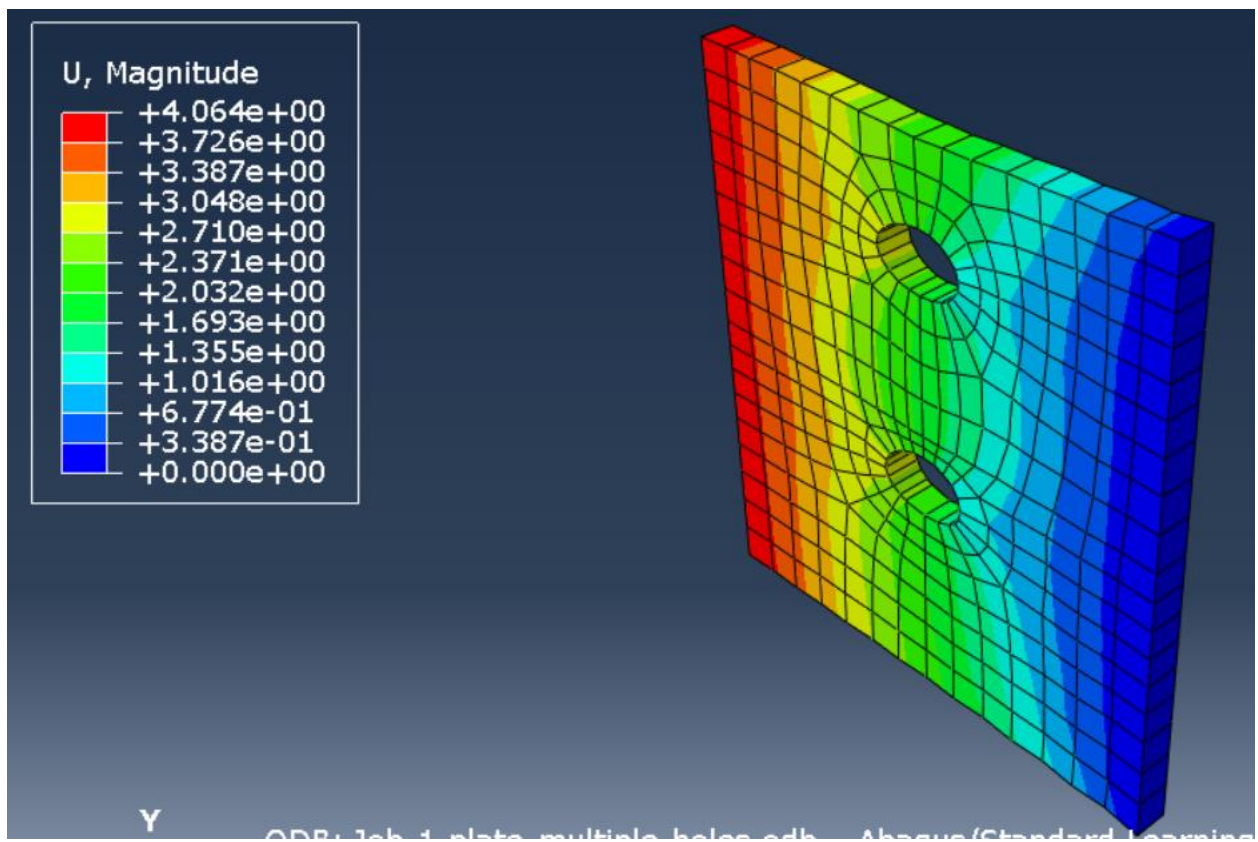


Mesh: (coarse due to limitation of 1000 nodes in ABAQUS educational version).

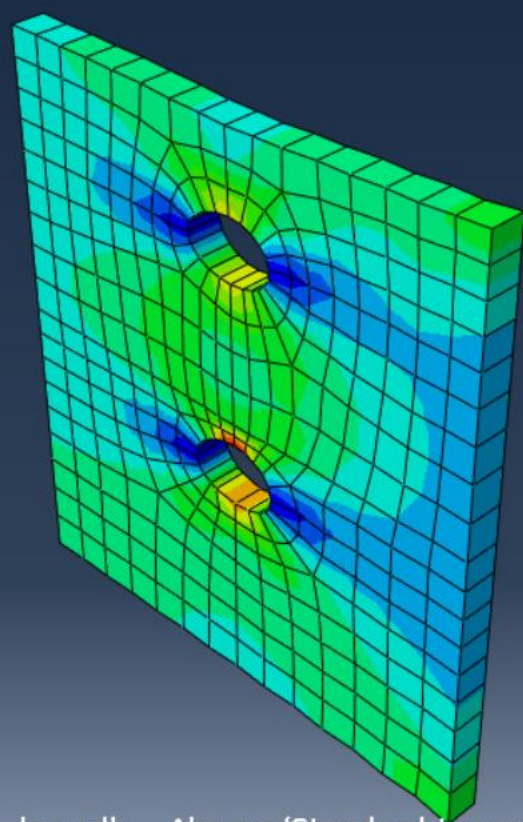


Results:

Deformation:



Mises Stress:



Y