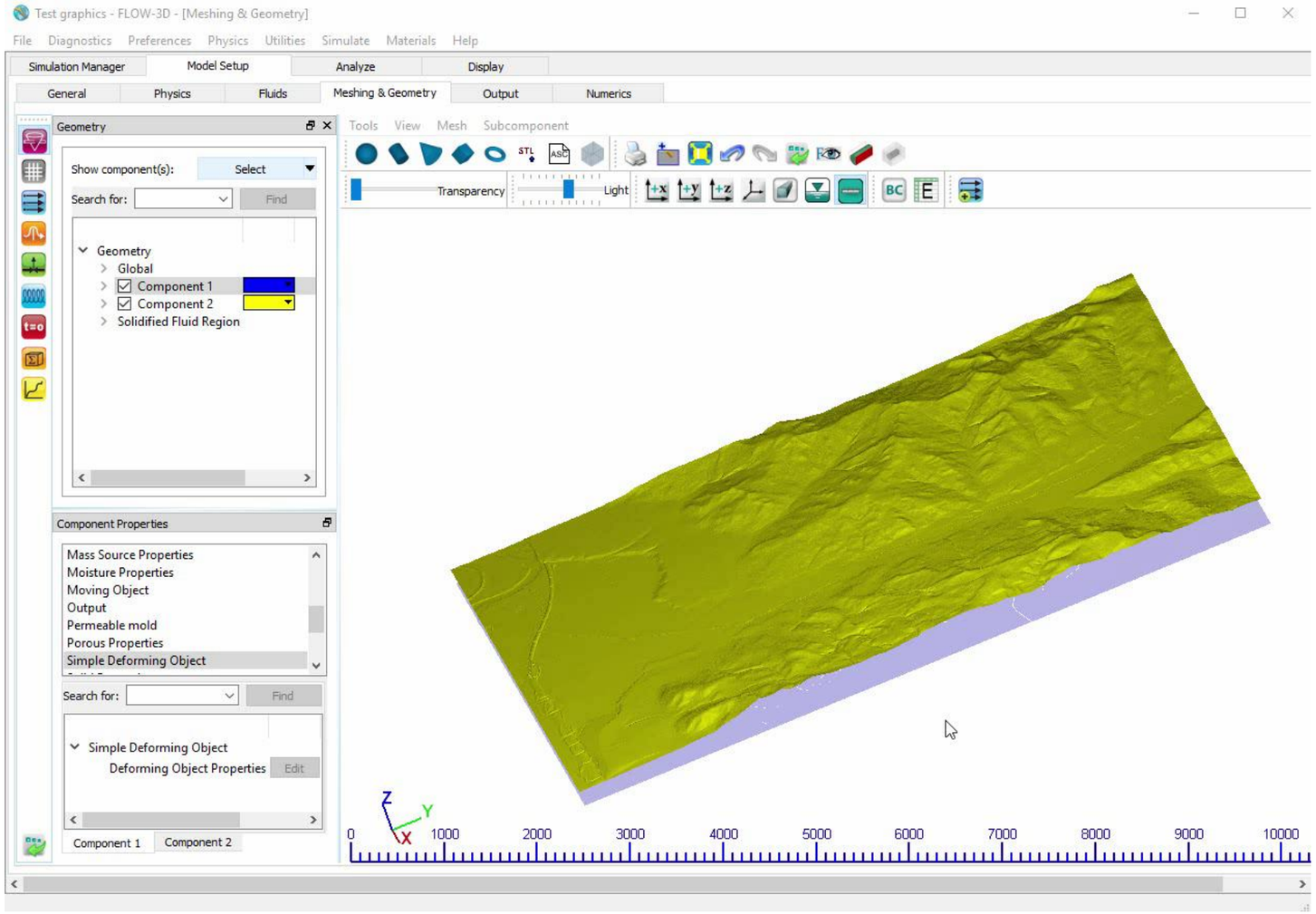
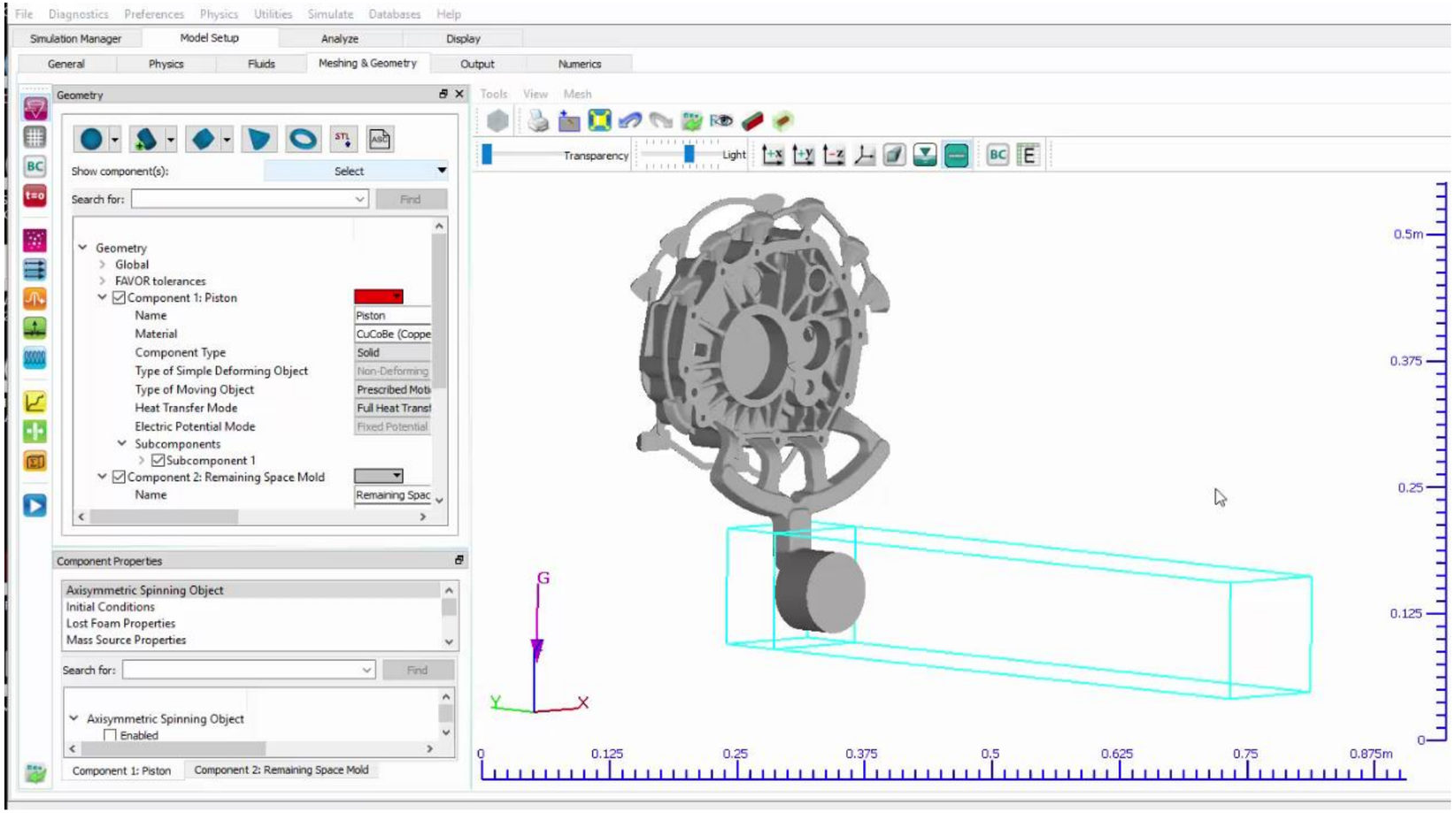
Developments in *FLOW-3D* Interfaces

John Ditter
VP of Software Engineering

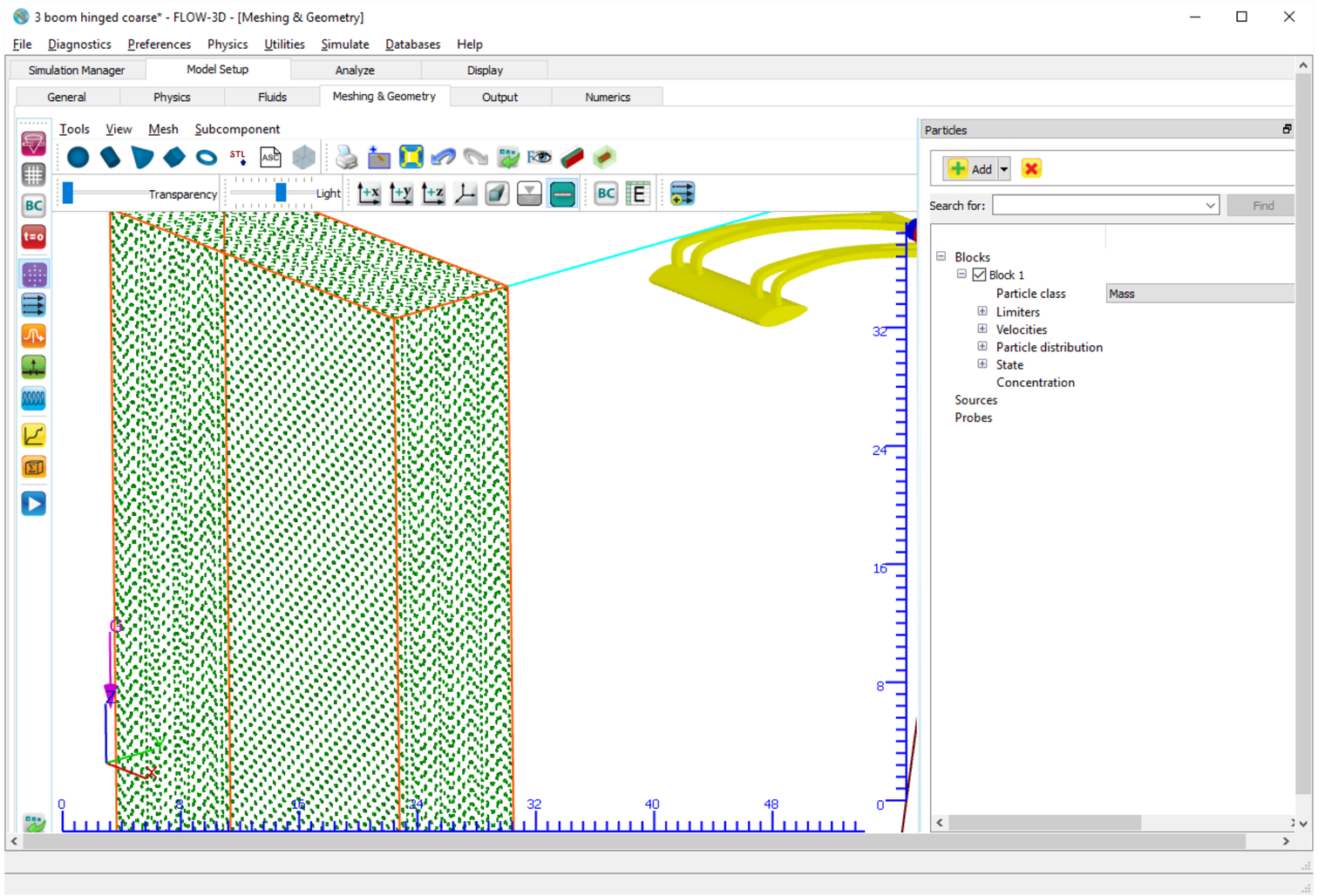
Big Raster Files



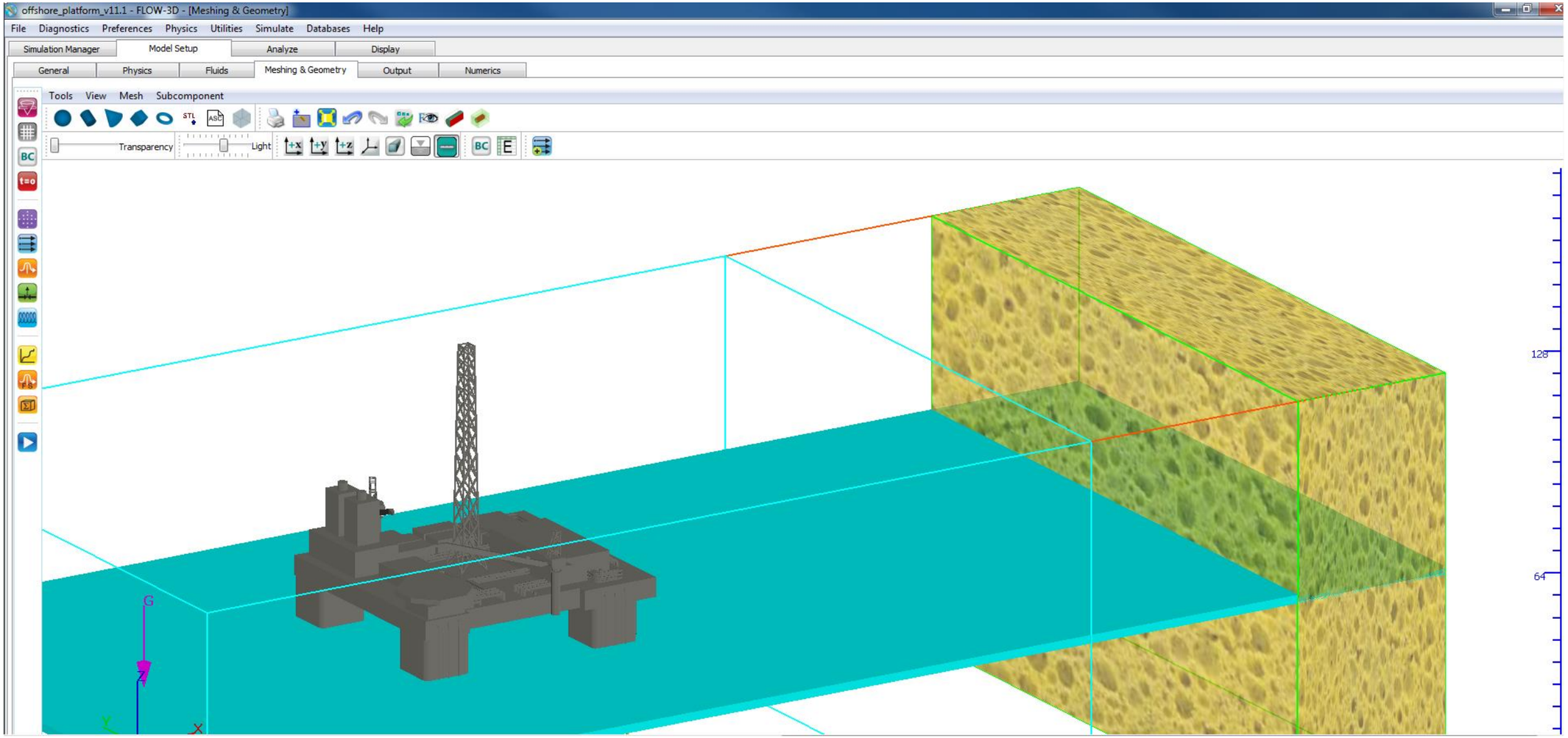
Interactive Geometry Creation



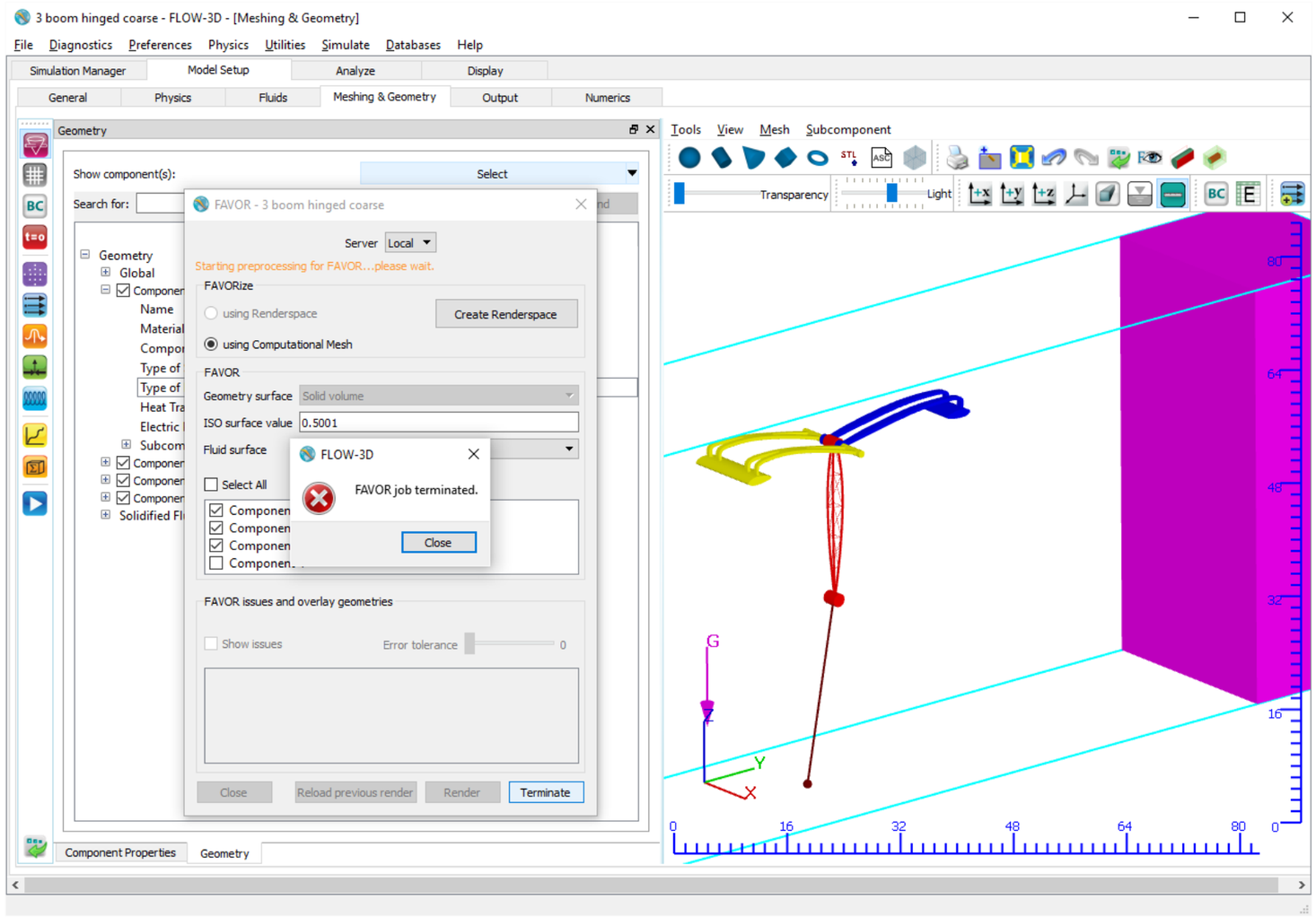
New Particle Input & Display



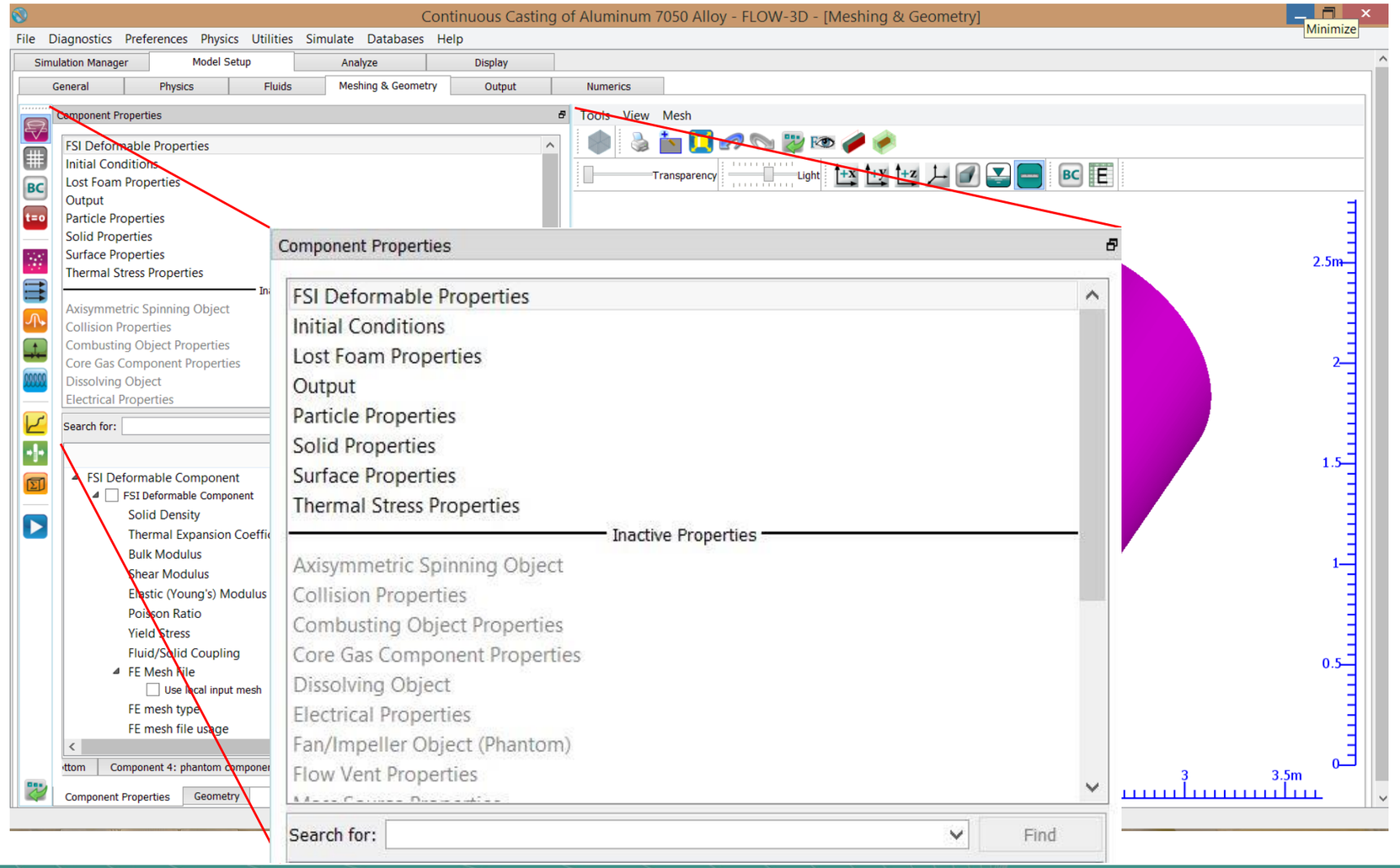
Wave Absorbing Boundary



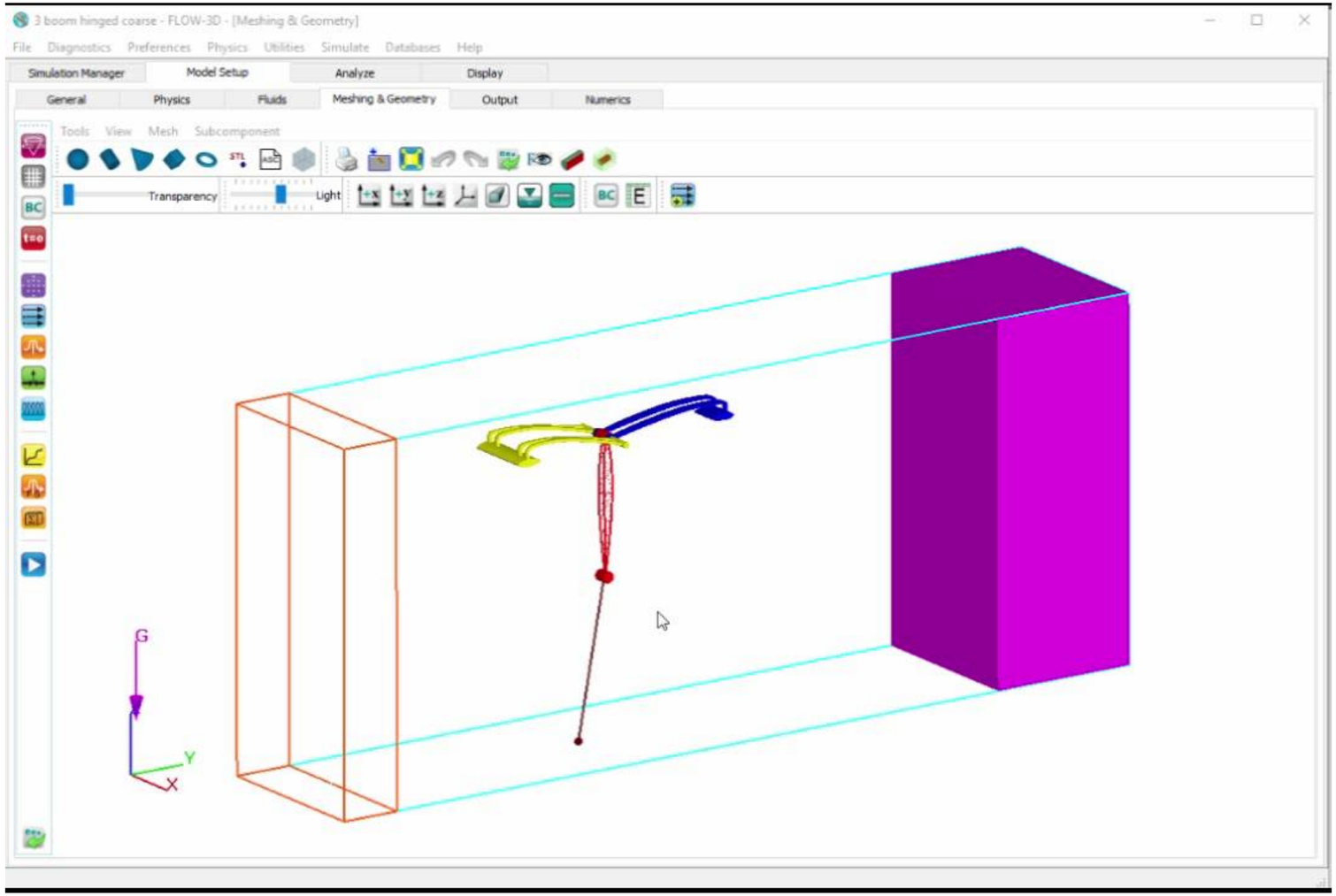
Terminate Function for FAVOR™ and FE Mesh Generation



Active Component Properties



Rulers


3 boom hinged coarse - FLOW-3D - [Meshing & Geometry]
File Diagnostics Preferences Physics Utilities Simulate Databases Help
Simulation Manager
Model Setup
Analyze
Display
General
Physics
Fluids
Meshing & Geometry
Output
Numerics
Tools View Mesh Subcomponent
Transparency
Light
G
Y
X

And More…

- Units displayed everywhere
- Default list of selected data
- Copy function for boundary conditions
- Eliminated accidental scroll

FlowSight™

FlowSight Performance

Restore time of session/context file

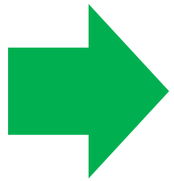
Number of cells	*FLOW-3D* v11.1	*FLOW-3D* Cast v4.2	Speed-up
10.6M	288 sec	97 sec	3.0X
17.0M	430 sec	230 sec	1.9X
38.3M	144 sec	53 sec	2.7X

FlowSight Performance

Loading massive conforming meshes

- 5 blocks
- 110 million cells
- Conforming meshes
- 51 cooling channels

***FLOW-3D* v11.1**
11 mins 45 secs

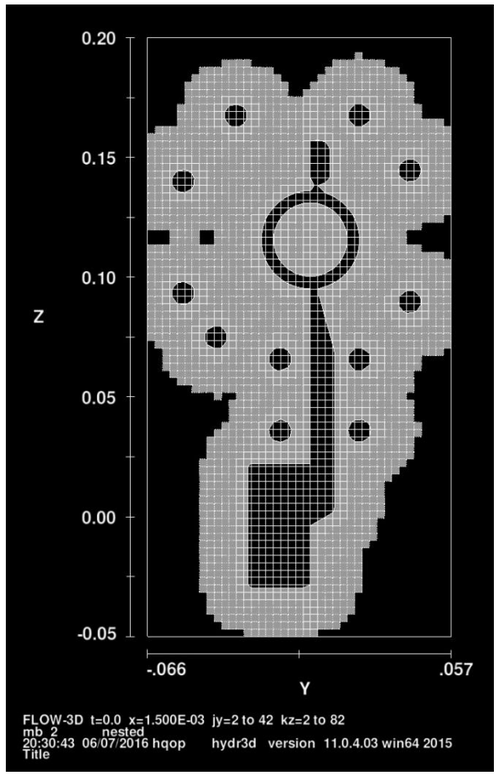


***FLOW-3D* Cast v4.2**
2 mins 15 secs

Test machine:
- 6 cores
- 16 GB RAM
- GeForce GT 640

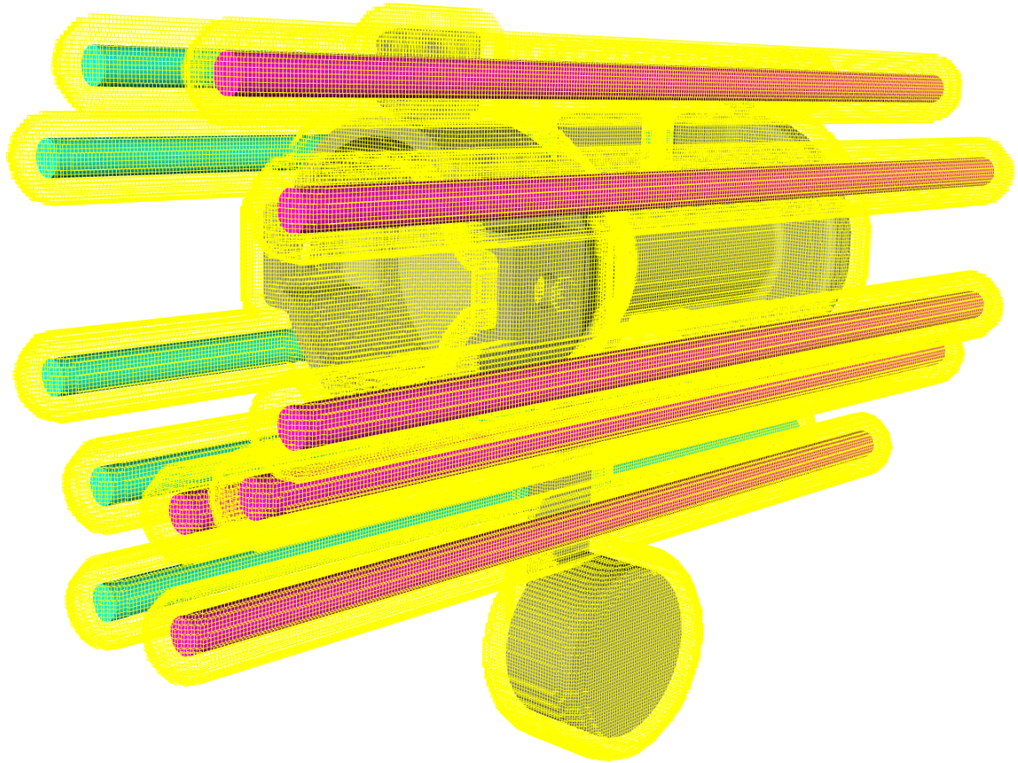
Visualizing Conforming Meshes

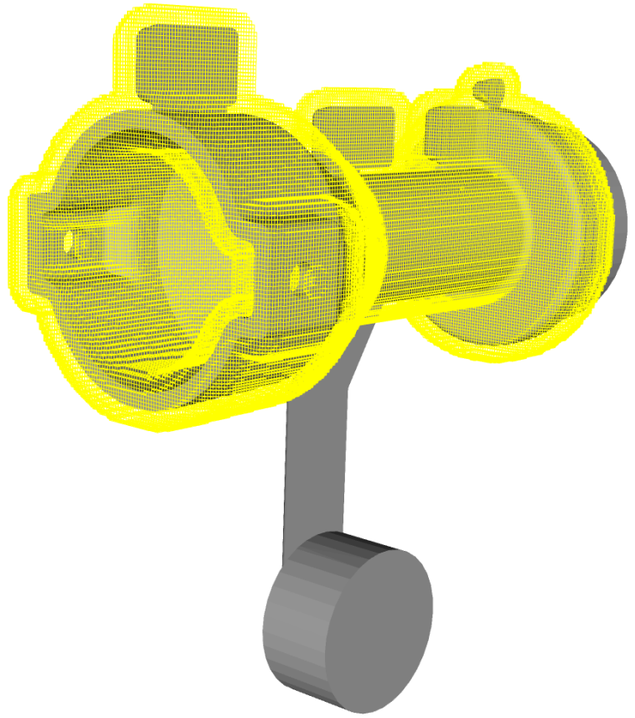
FLOW-3D Cast v4.1



FLOW-3D v11.1

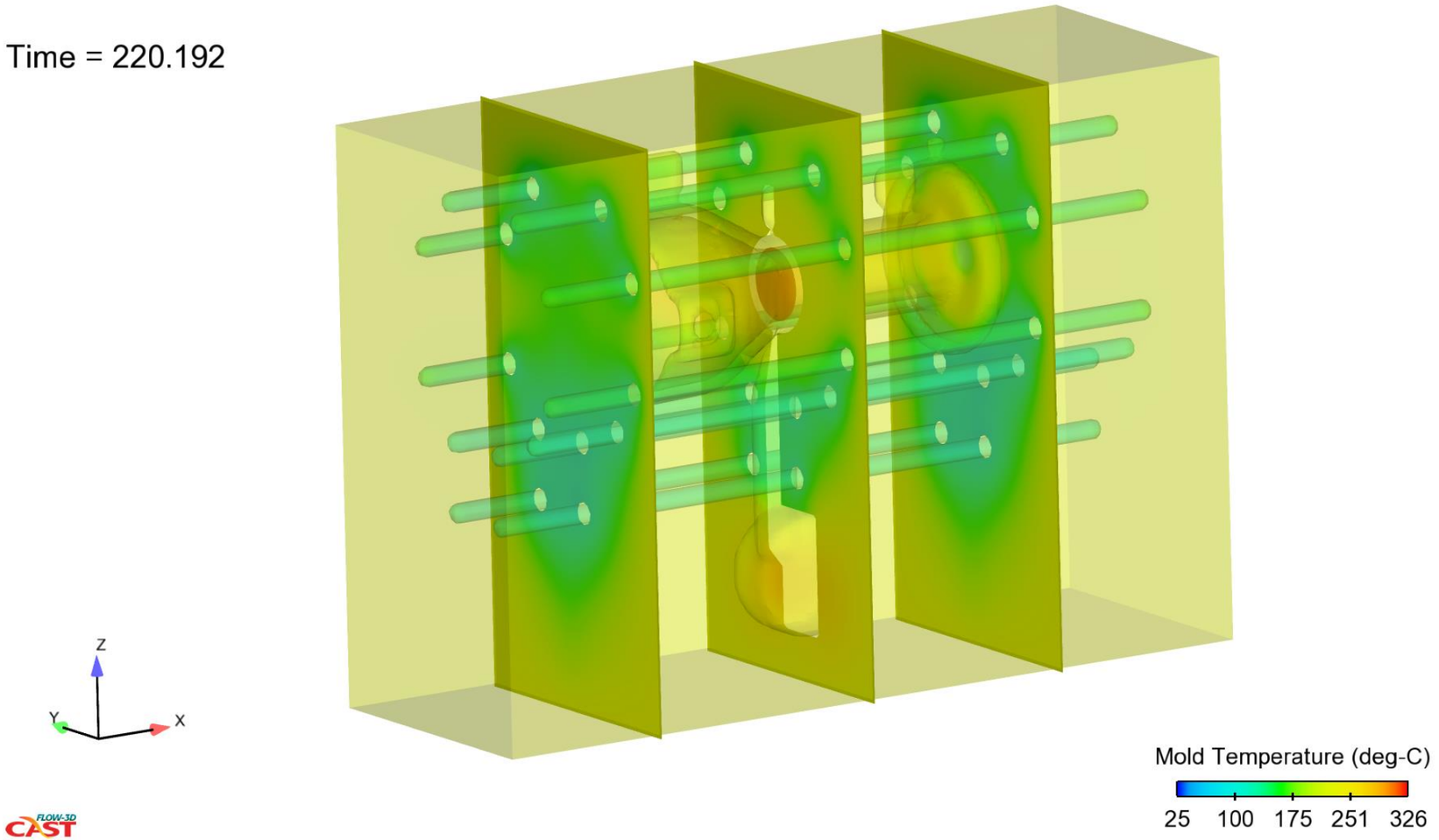
FLOW-3D Cast v4.2





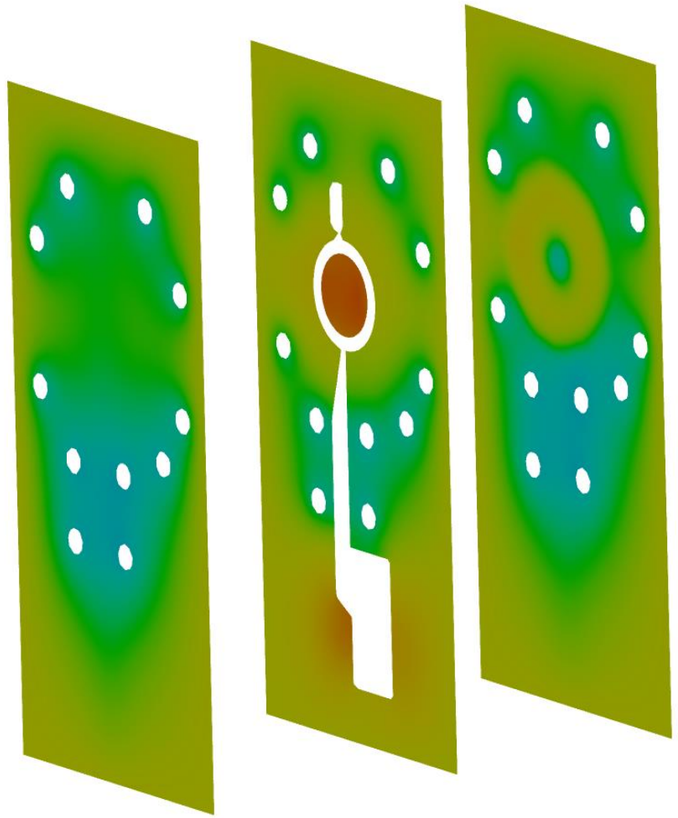
FLOW-3D v11.2

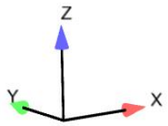
Mesh Visualization on 2D Clips



Mesh Visualization on 2D Clips

Time = 220.192

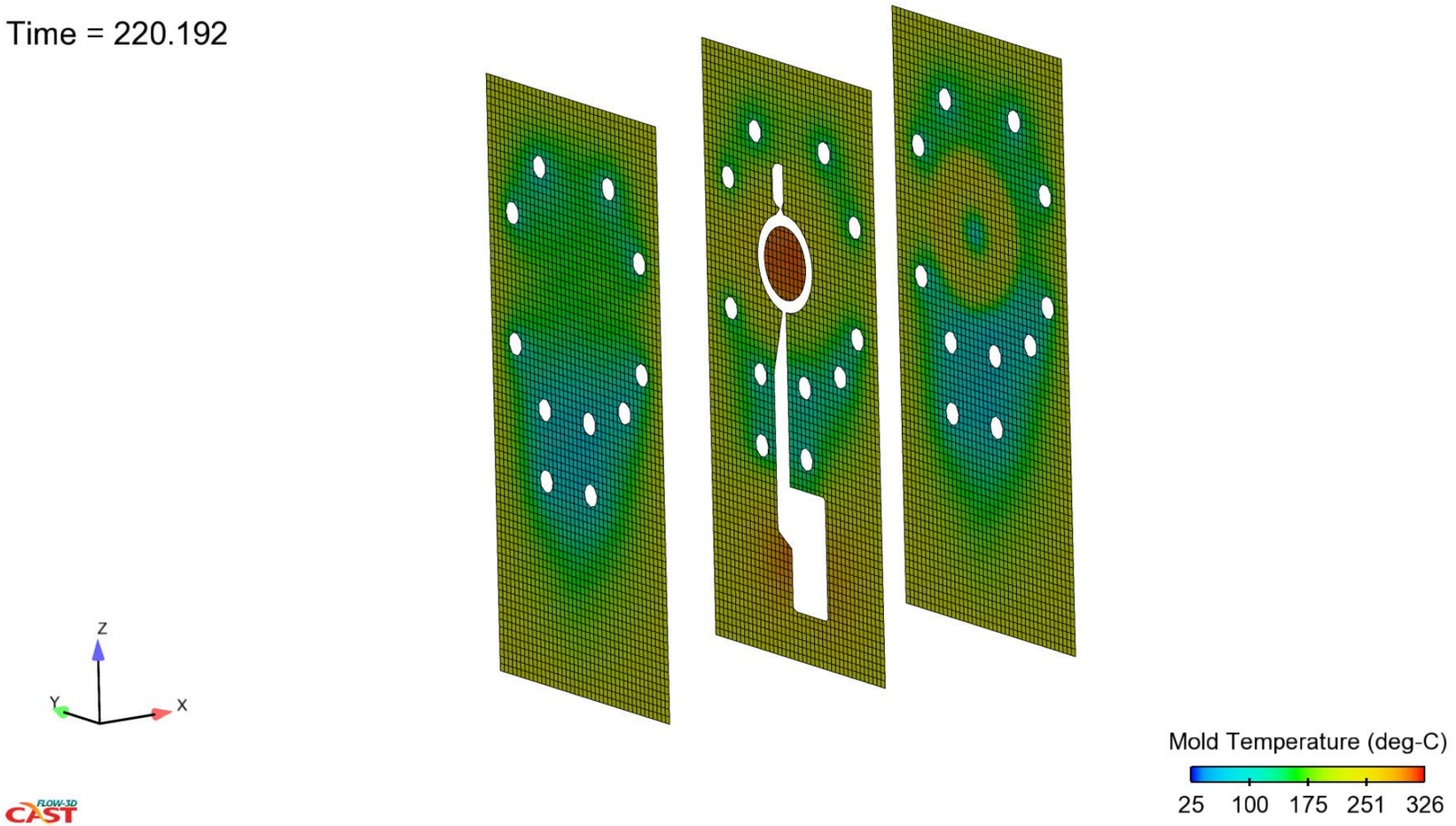




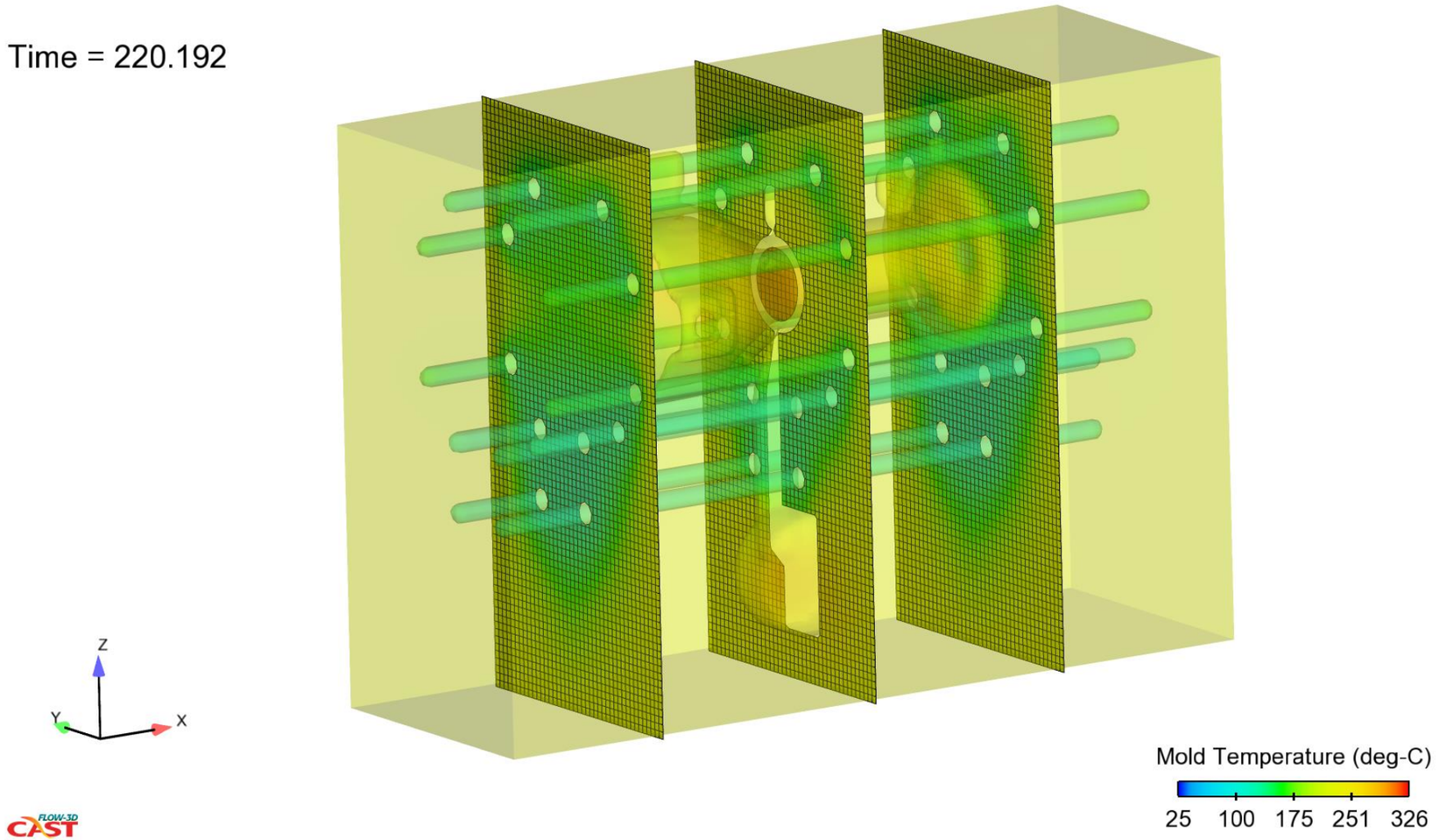
Mold Temperature (deg-C)

25 100 175 251 326

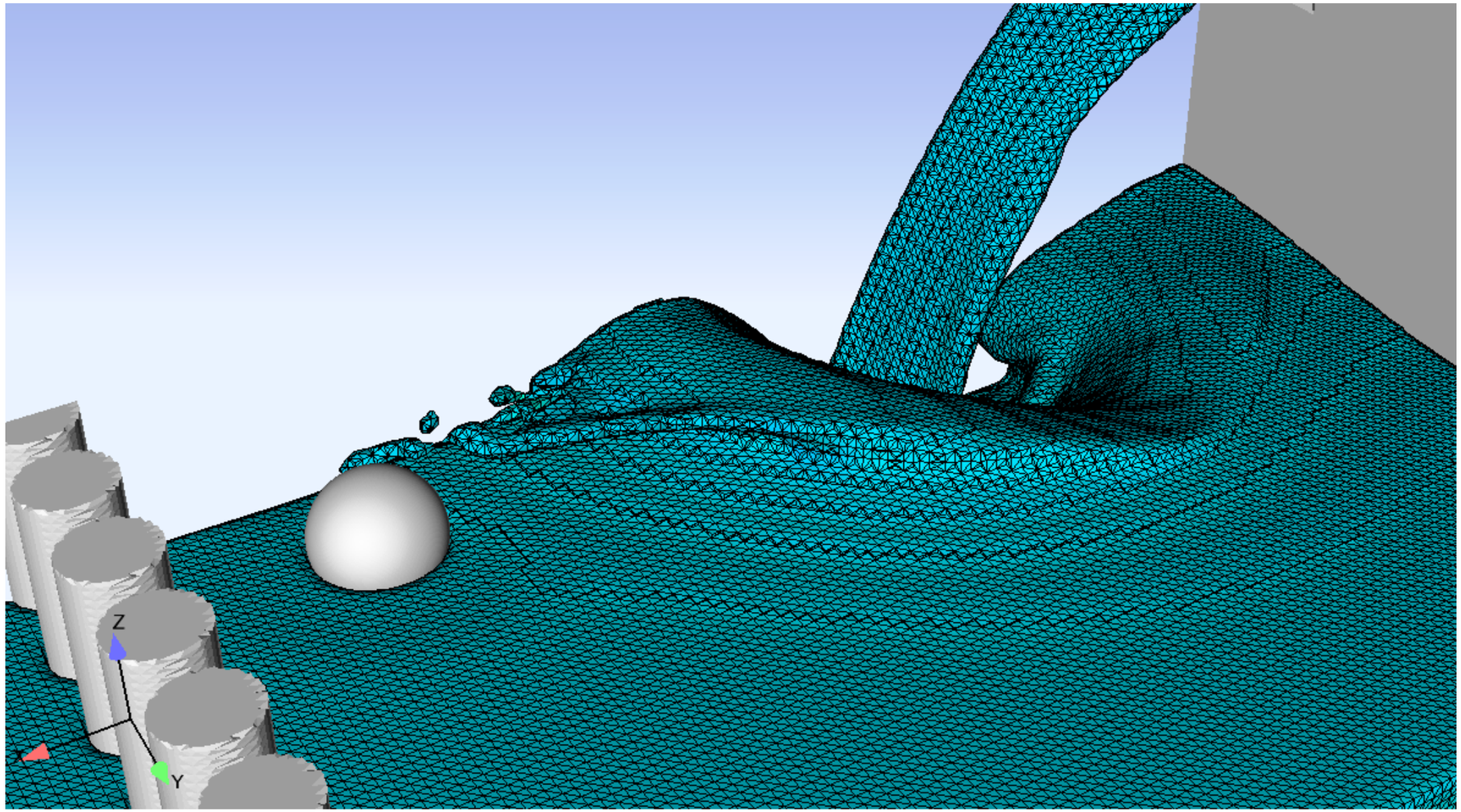
Mesh Visualization on 2D Clips



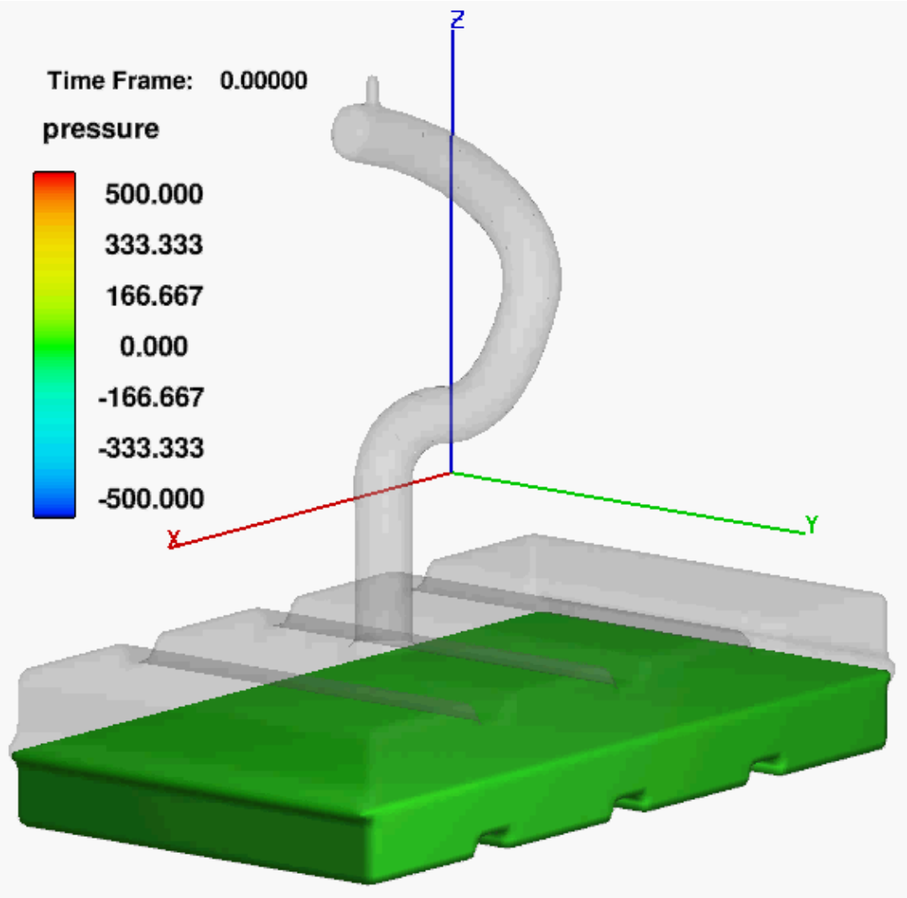
Mesh Visualization on 2D Clips



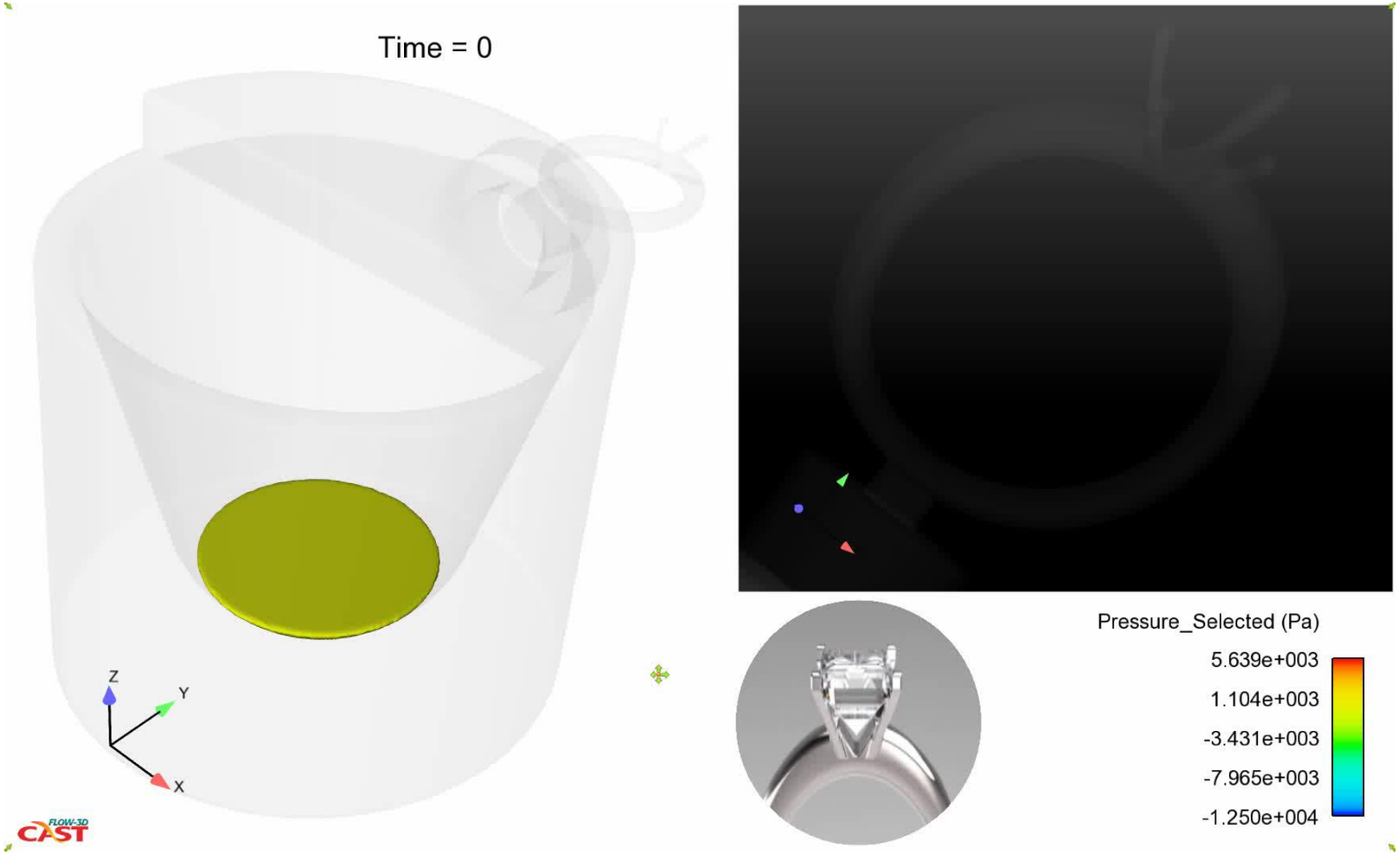
Mesh Visualization on Iso-surfaces



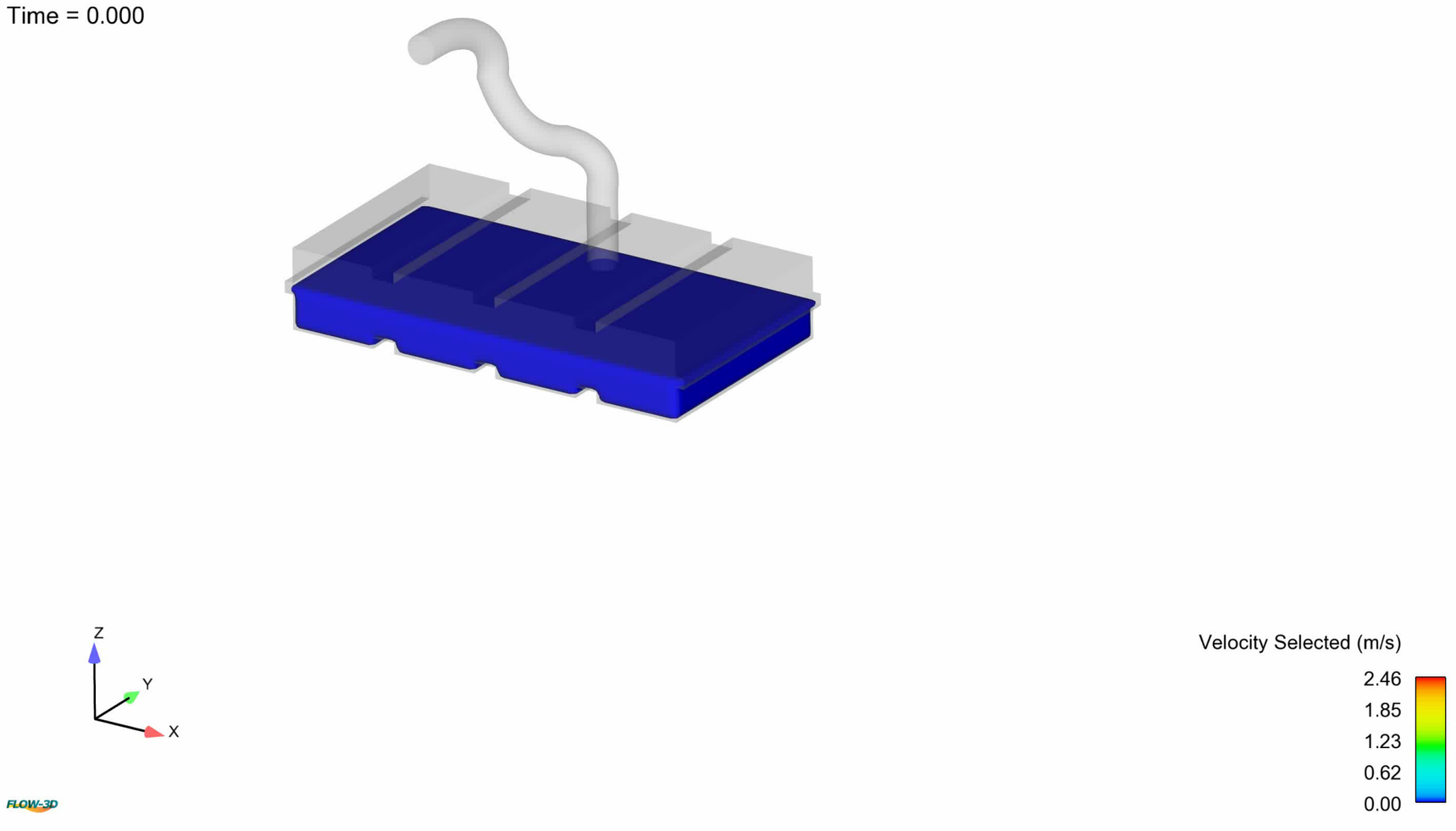
Visualizing Non-inertial Reference Frame Motion



Visualizing Non-inertial Reference Frame Motion



Visualizing Non-inertial Reference Frame Motion



Visualizing Non-inertial Reference Frame Motion

Thank you!