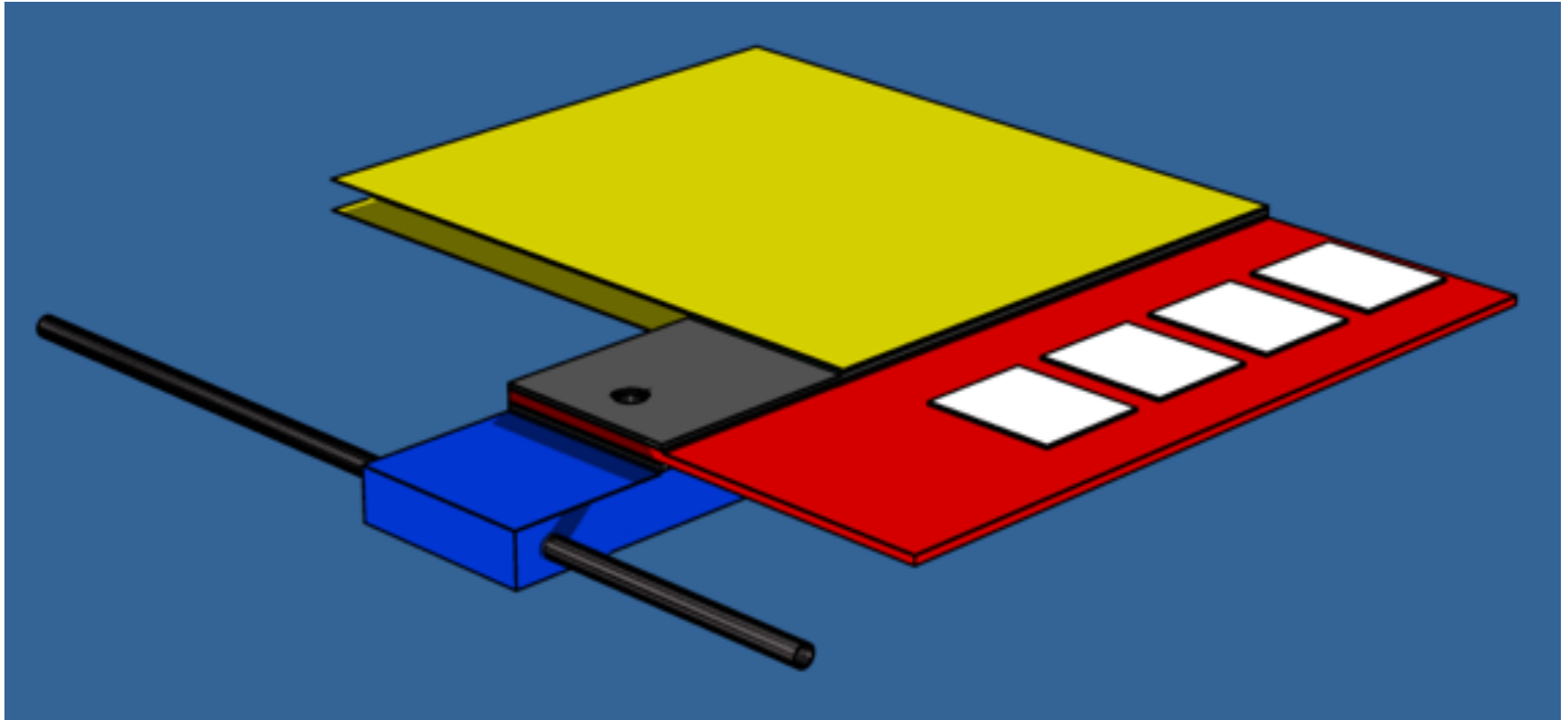


Latest FE Results

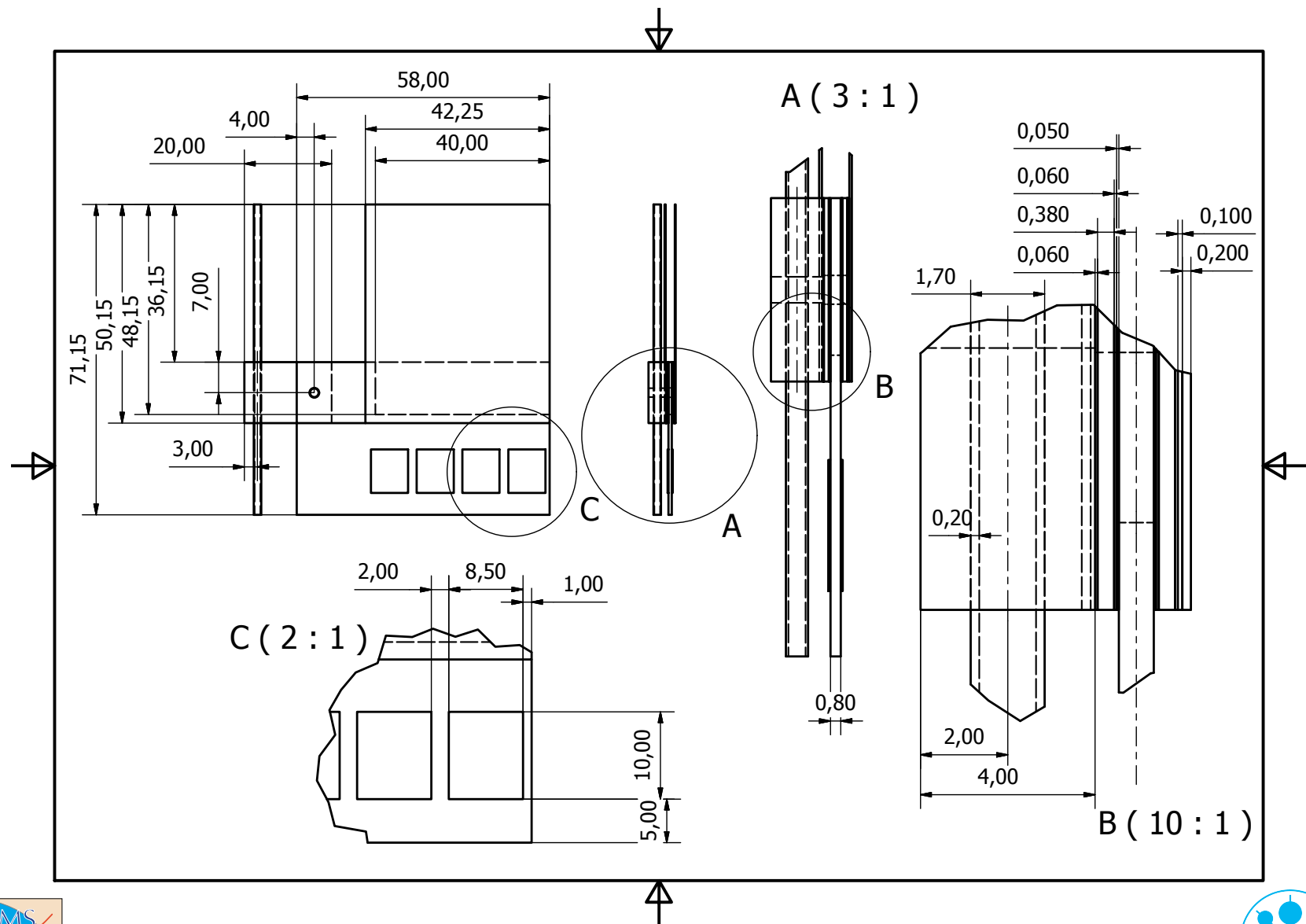


Andreas Mussgiller
Tracker Upgrade Meeting
08/03/2011

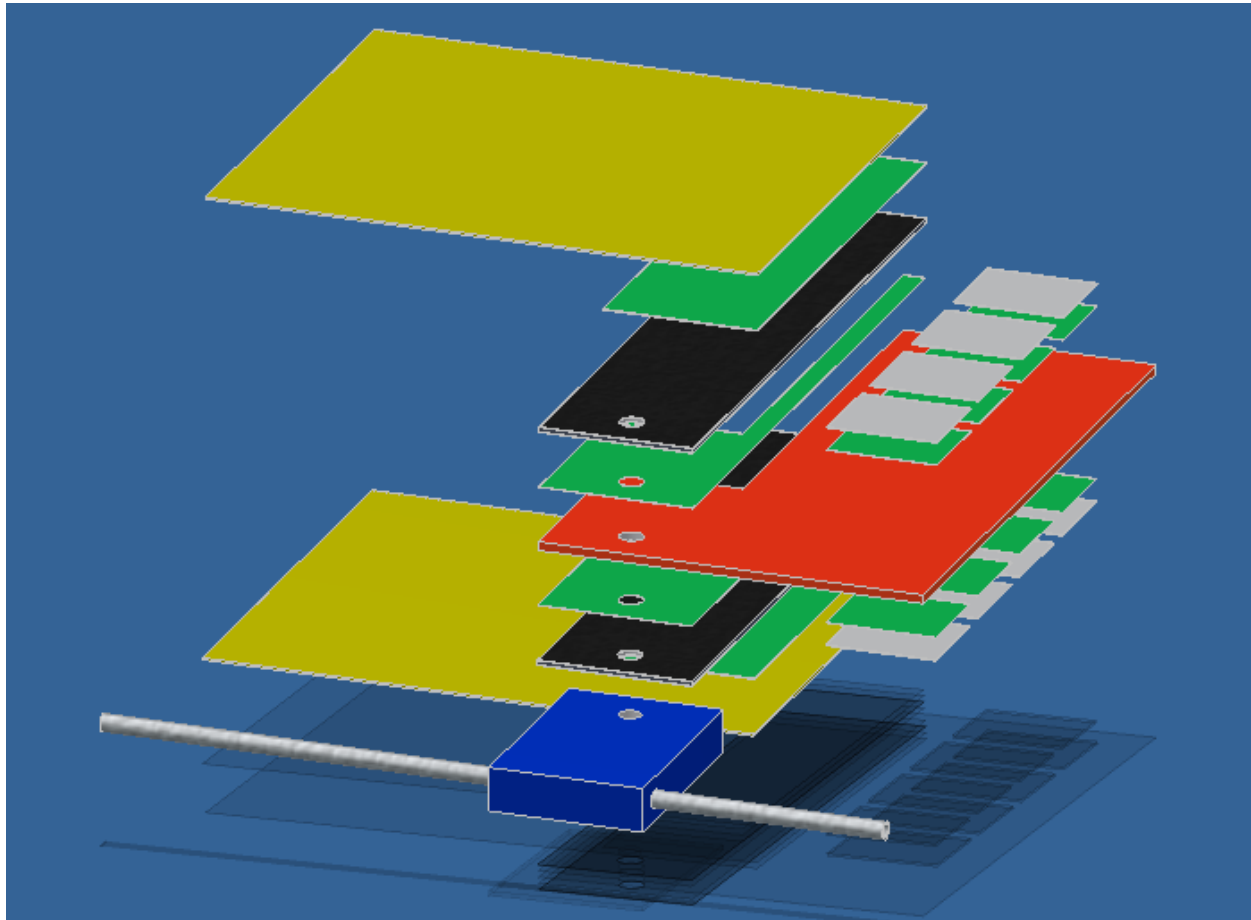


- > 5 cm strips
- > hybrids to both sides of the sensor ,handling' both sensors
- > 32 chips in total

Pt Module - cont.

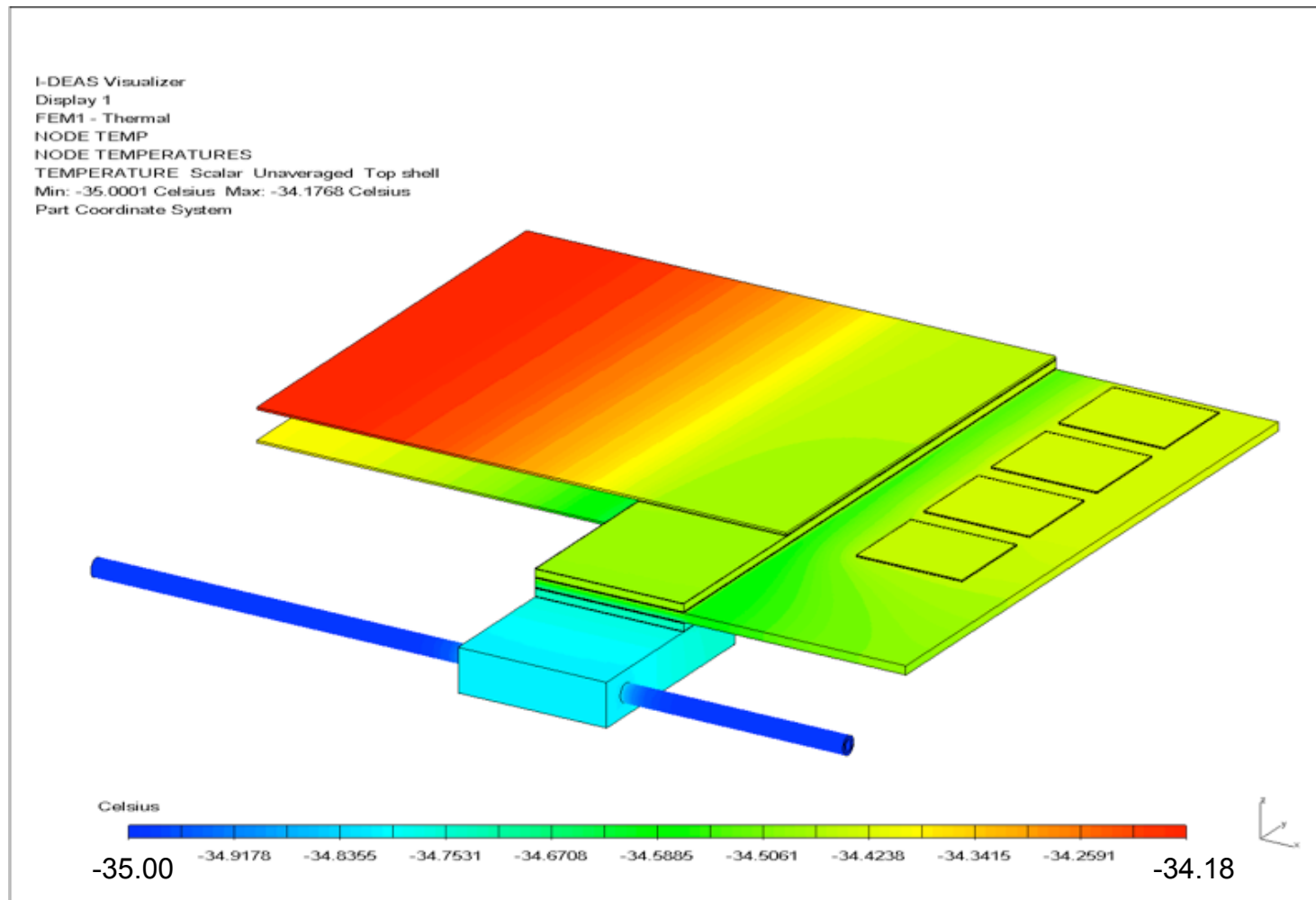


Pt Module - cont.



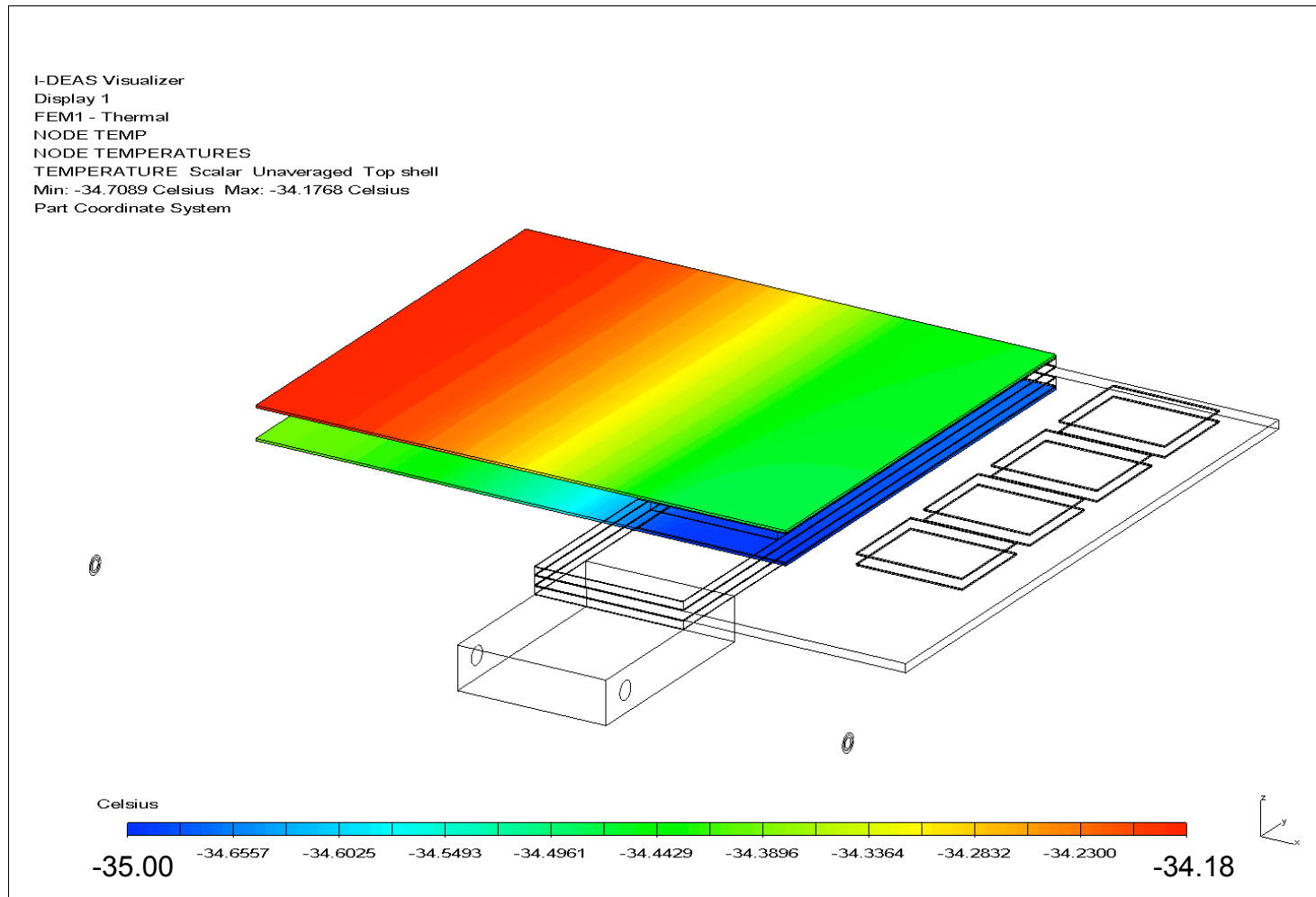
- > Design symmetric about hybrid plane - good for deformation
- > Heat from chips needs to go through hybrid

Pt Module - Results



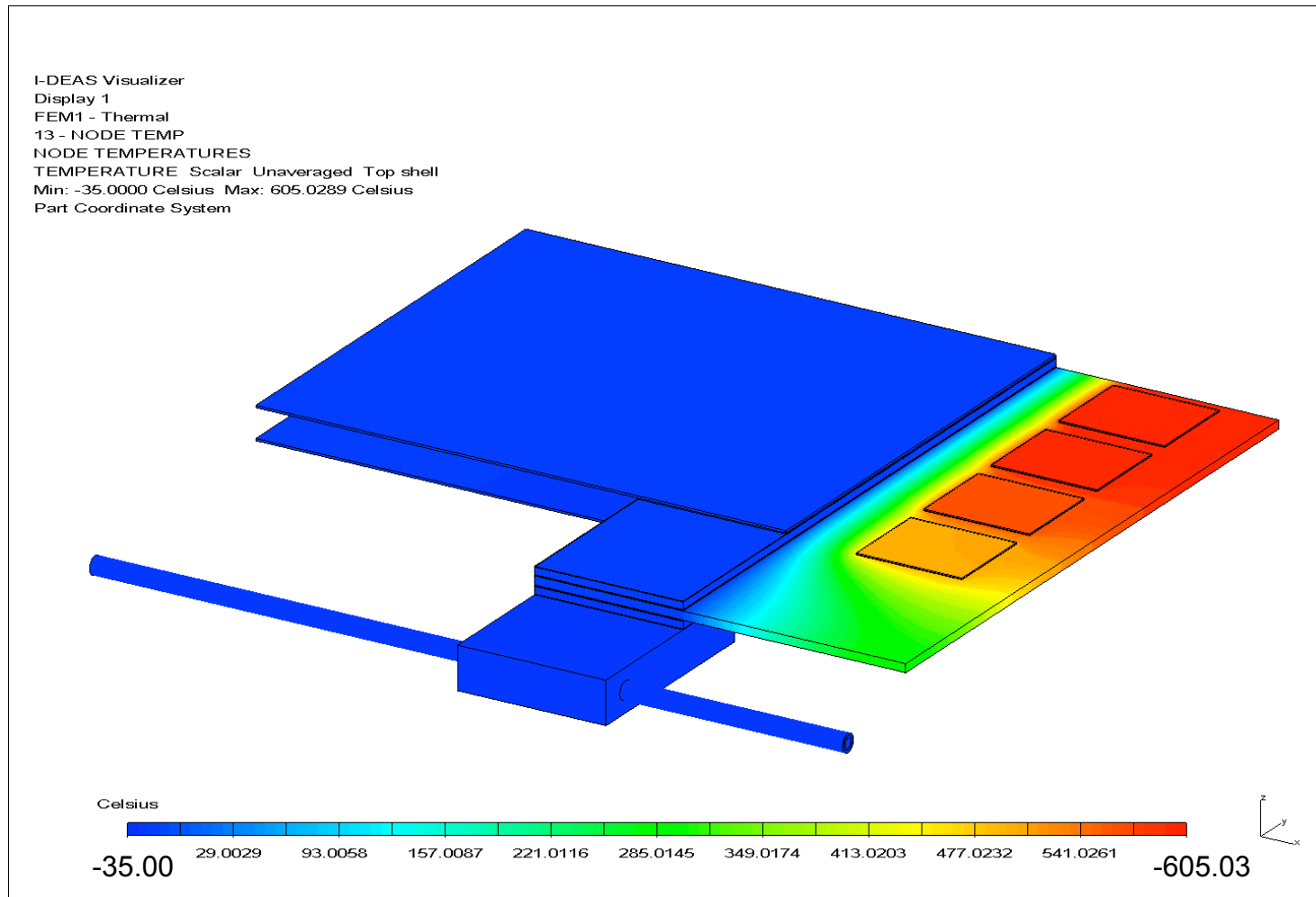
➤ 100mW from sensors (400mW total); 0mW from chips

Pt Module - Results (Just Sensors)



> 100mW from sensors (400mW total); 0mW from chips

Pt Module - Results cont.



> 100mW from sensors (400mW total); 1W from chips (4W in total)

Standard Design with Spacer and Rod

I-DEAS 12 NX Series m3: DESY : D:\IDEAS_WORK\StandardDouble02.mf1

25-Jan-11 11:38:30

Database: D:\IDEAS_WORK\StandardDouble02.mf1

View : No stored Workb_View

Task : Post Processing

Model: FEM5 - No 002 Flex

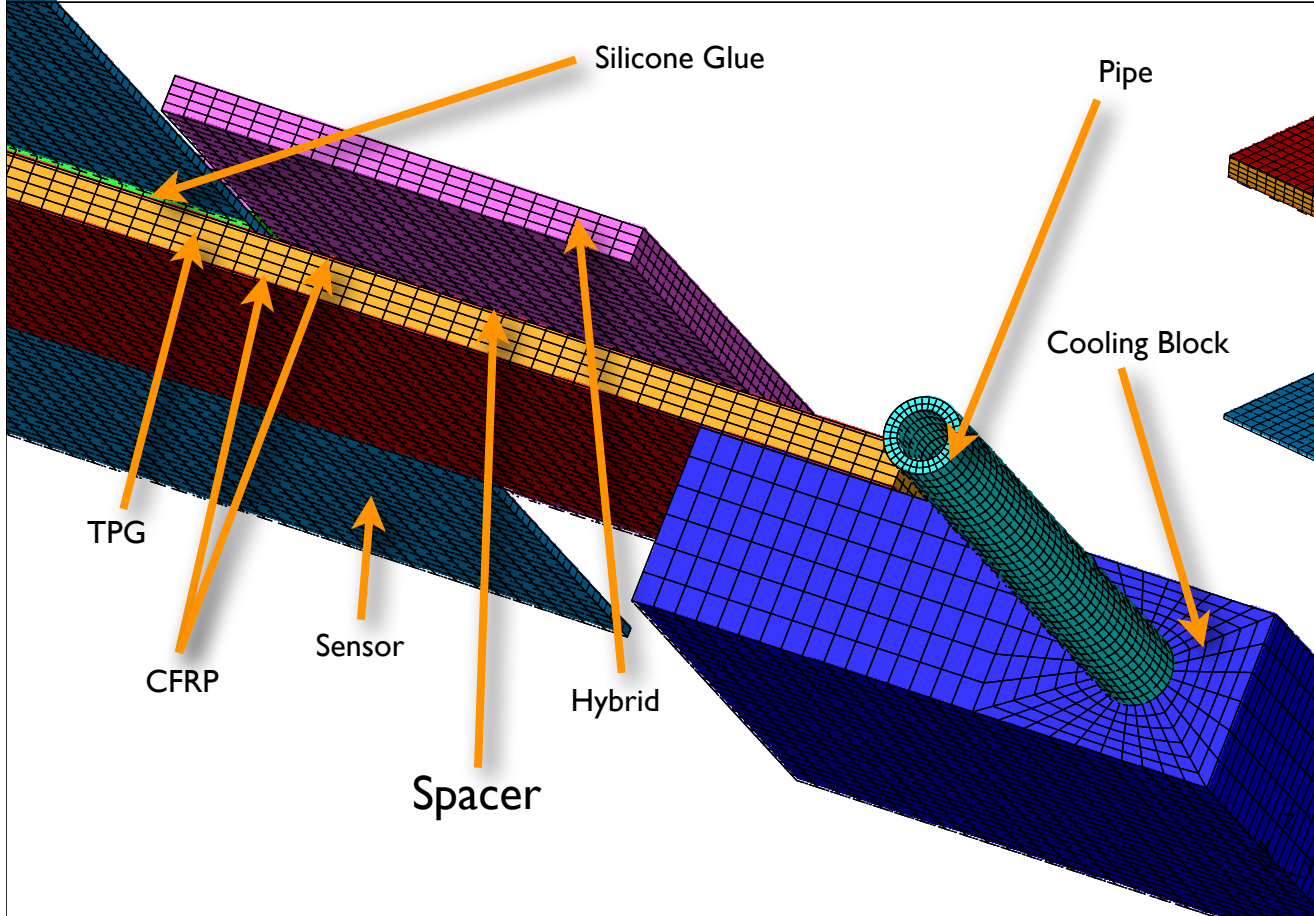
Active Study: DEFAULT FE STUDY

Units : MM

Display : No stored Option

Model/Part Bin: Quarter

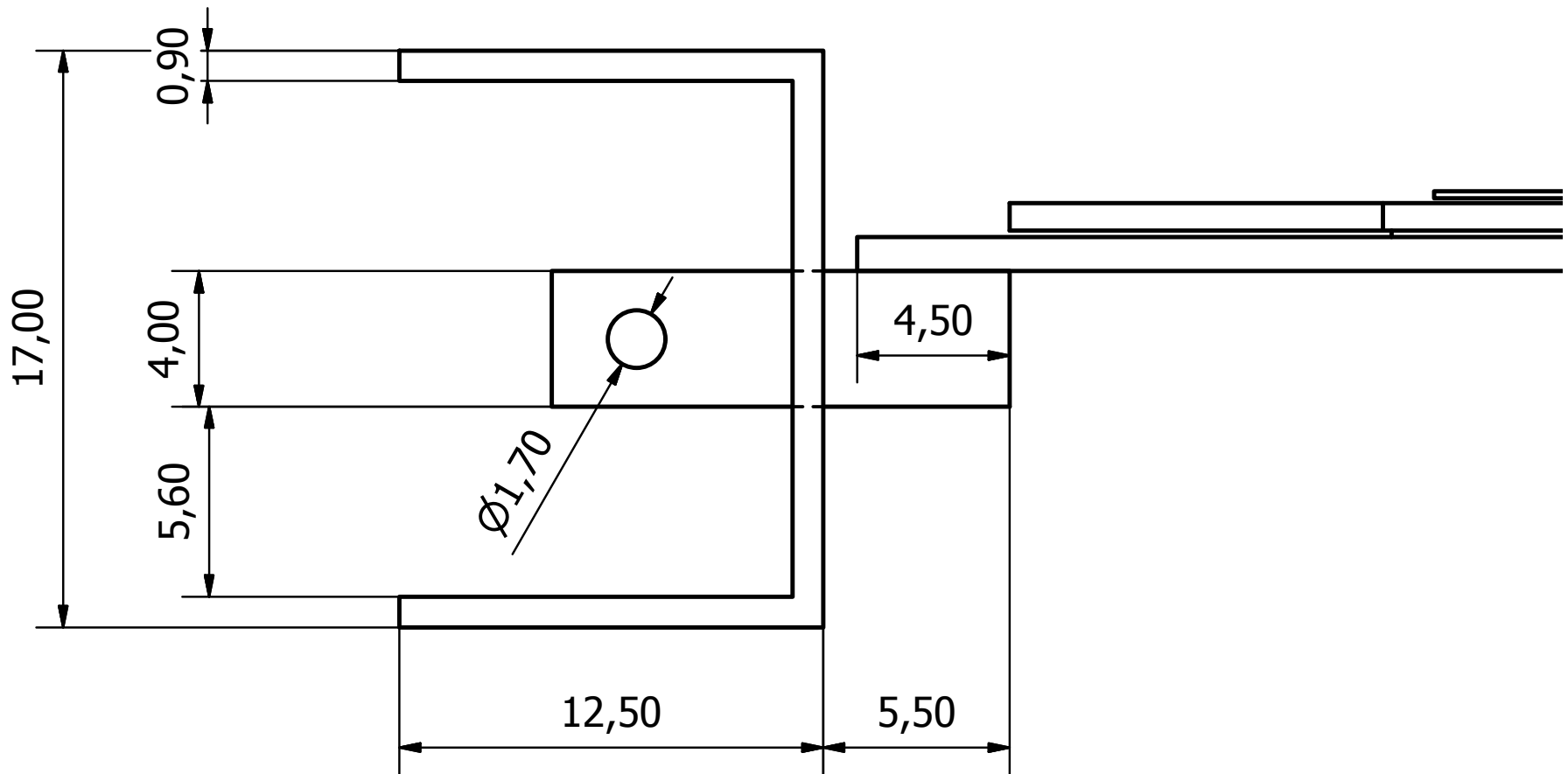
Parent Part: Module FEPart Full Cooling



> Spacer between support strip and hybrid added

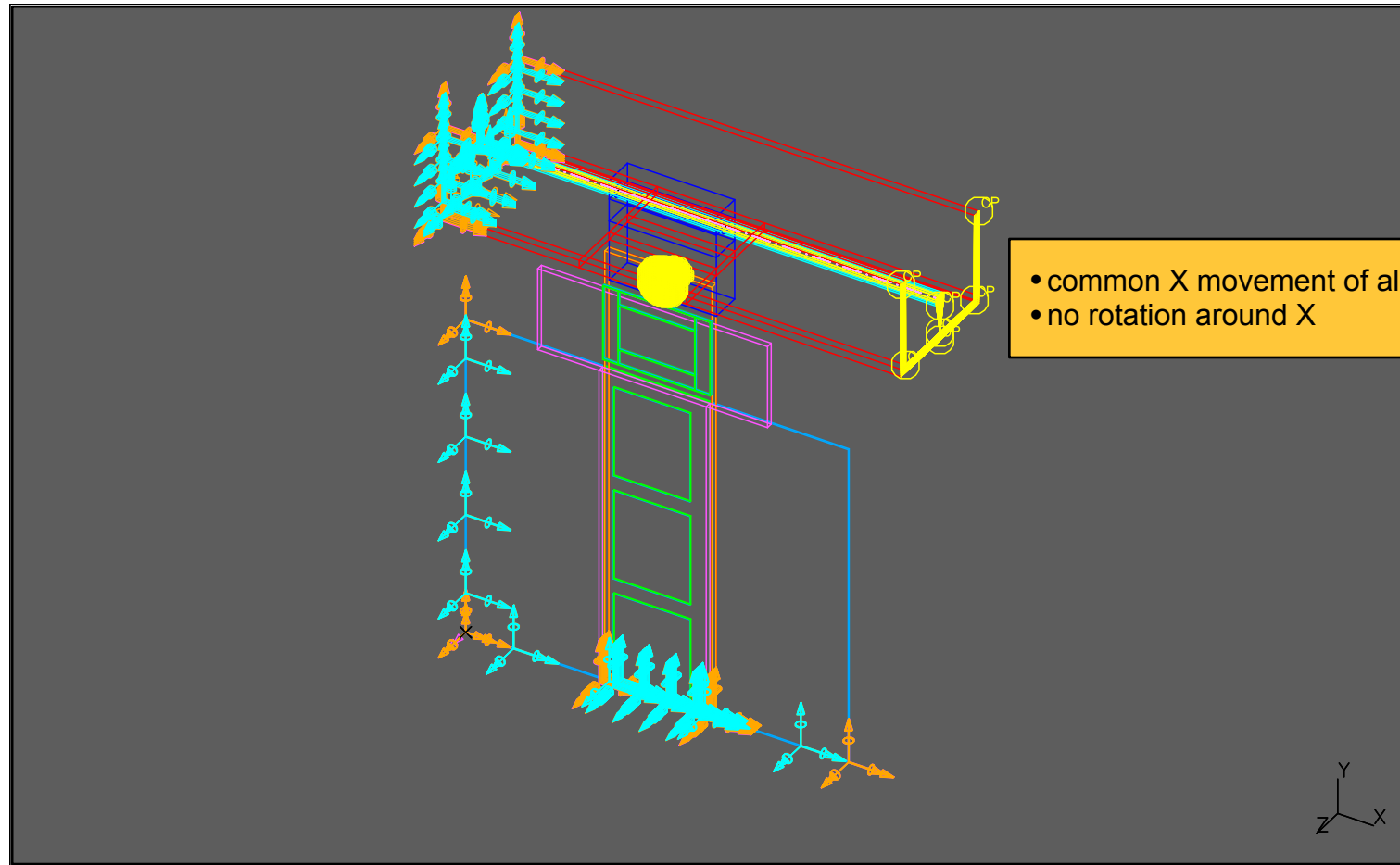


Standard Design with Spacer and Rod - cont.



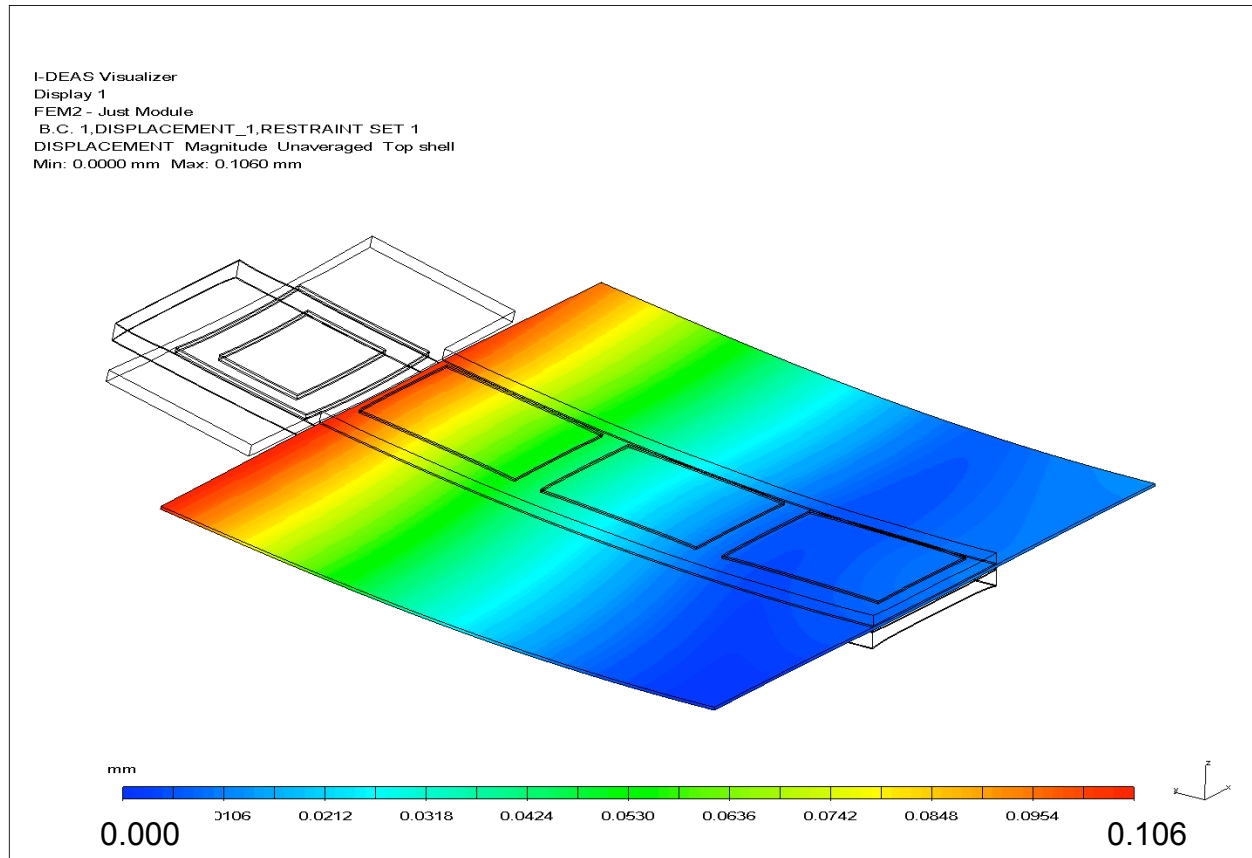
➤ Cooling block embedded in CFRP rod

Standard Design with Spacer and Rod - cont.



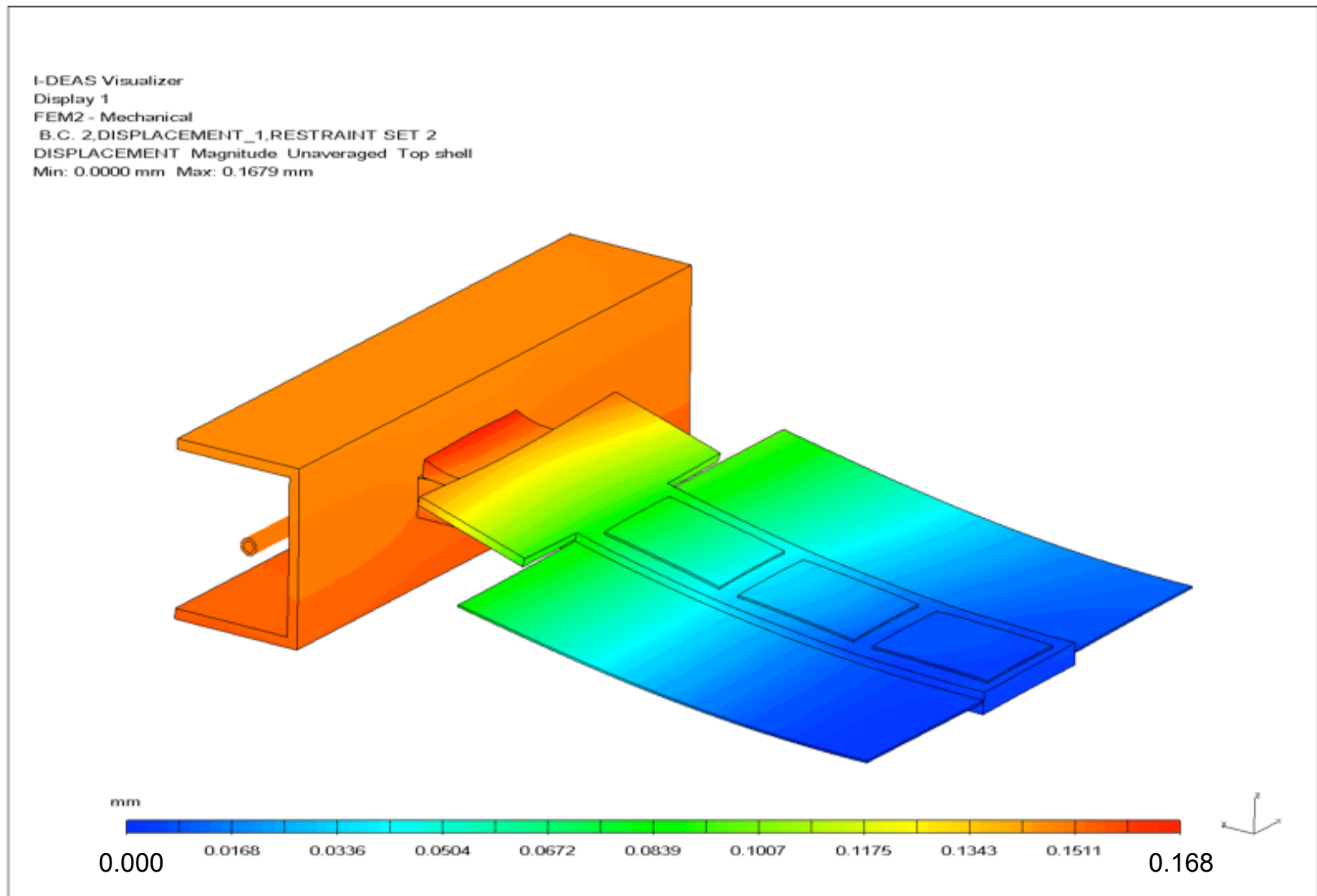
- > Every other module along rod mounted from other side
- > Module deformation causes alternating twist of rod

Standard Design with Spacer - Results



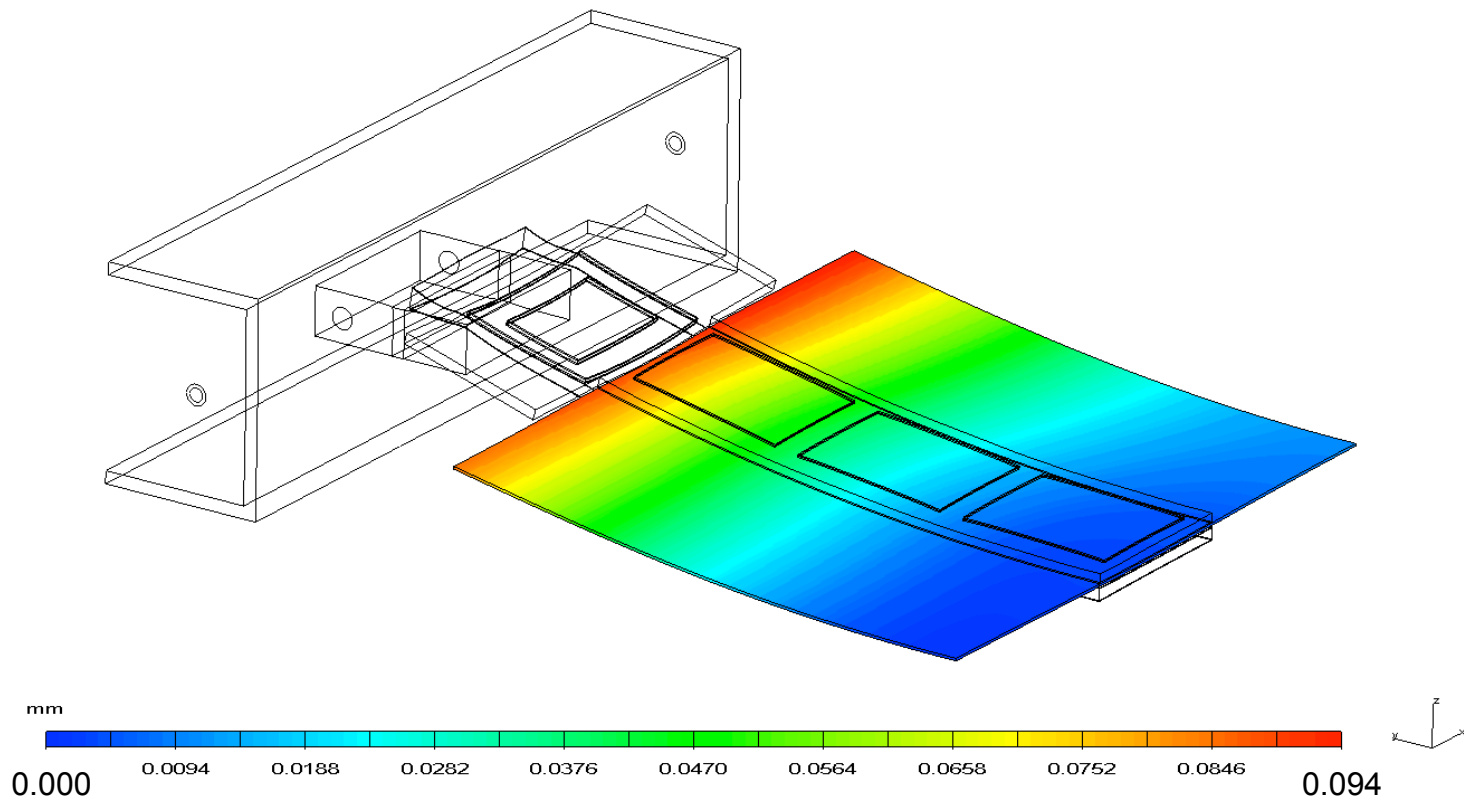
➤ Bowing larger than in design without spacer (~84μm)

Standard Design with Spacer and Rod - Results

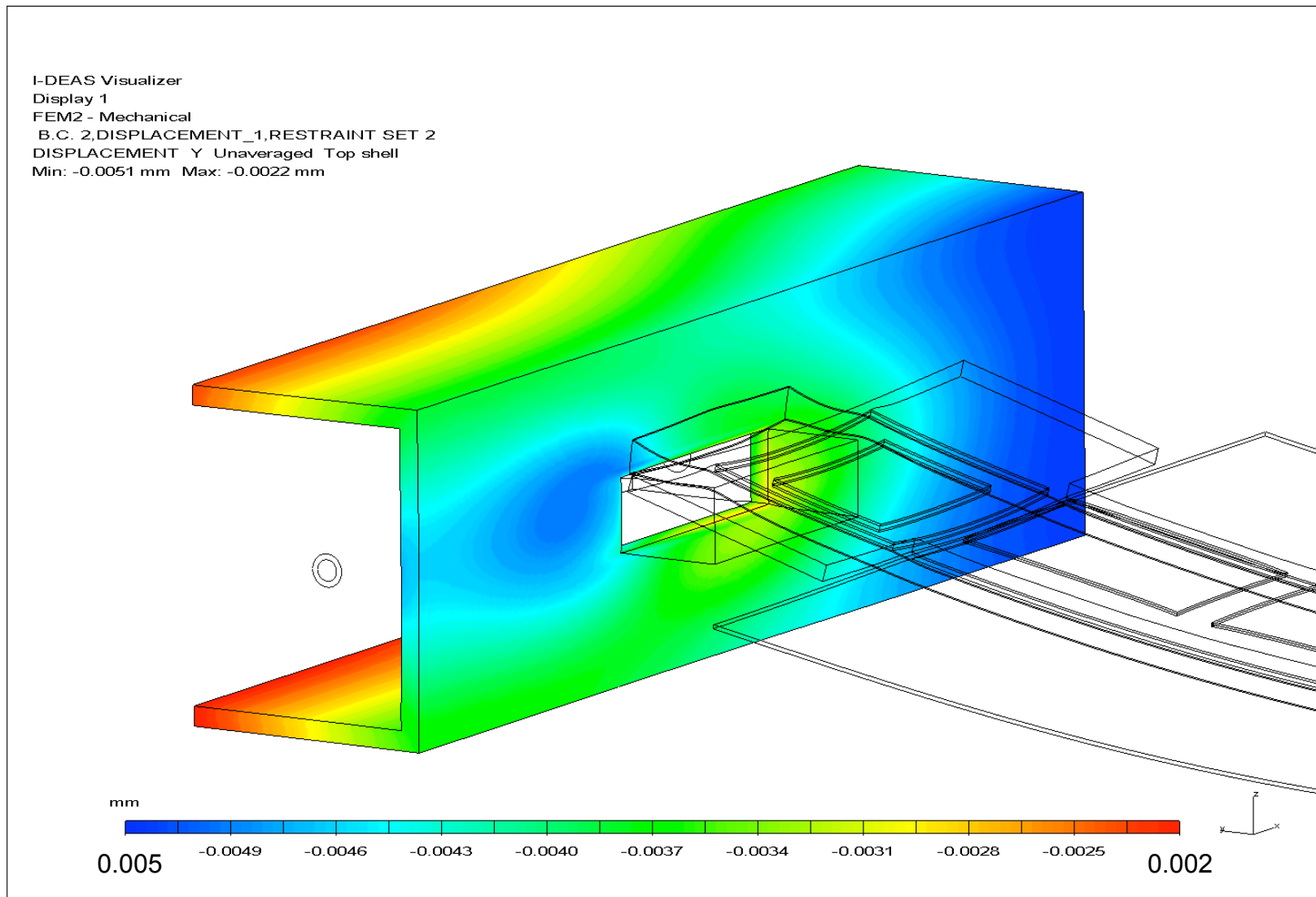


Standard Design with Spacer and Rod - Results

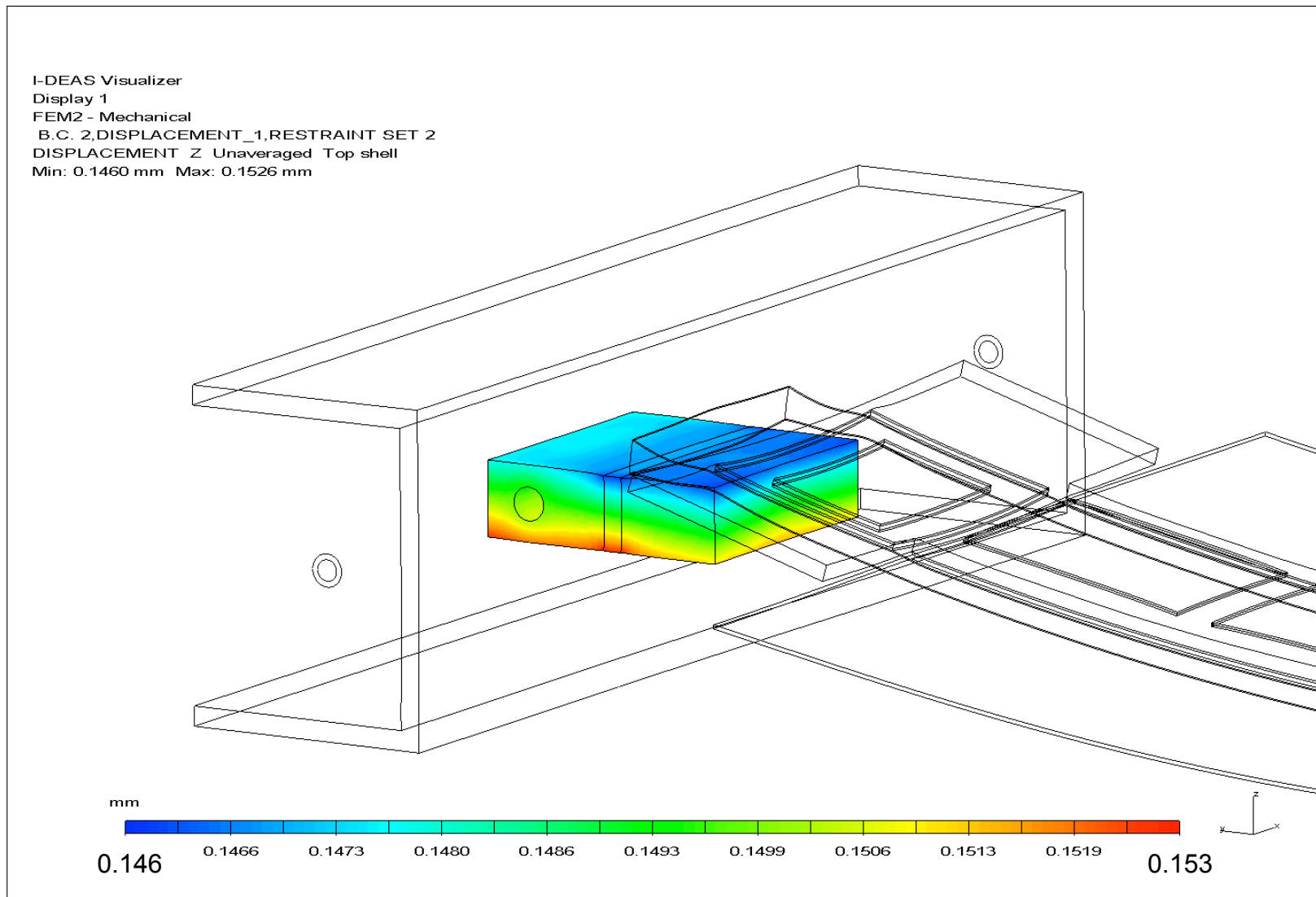
I-DEAS Visualizer
Display 1
FEM2 - Mechanical
B.C. 2, DISPLACEMENT_1, RESTRAINT SET 2
DISPLACEMENT Magnitude Unaveraged Top shell
Min: 0.0000 mm Max: 0.0940 mm



Standard Design with Spacer and Rod - Results



Standard Design with Spacer and Rod - Results



Standard Design with Spacer and Rod - Results

