

CAMPPASS

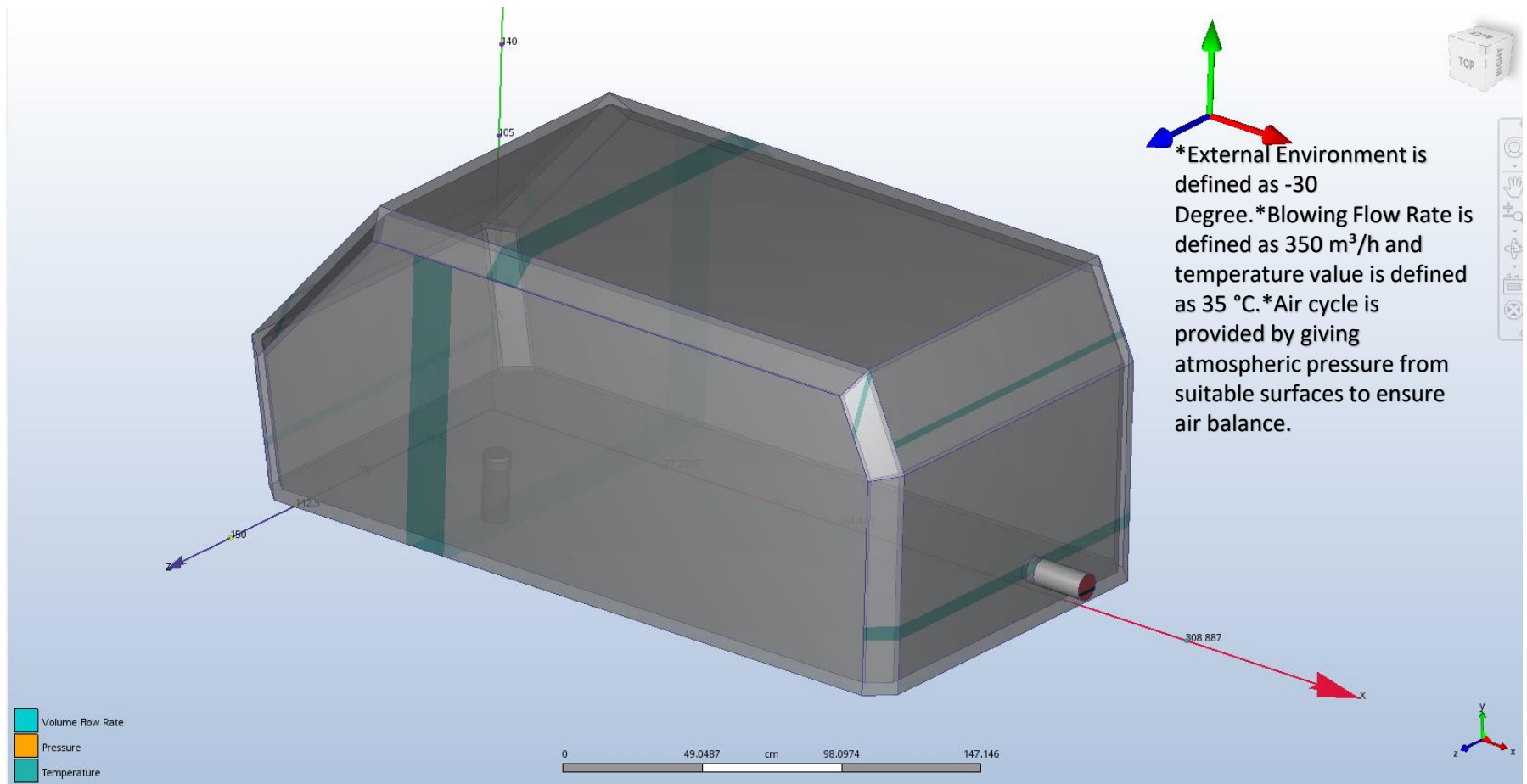
CARAVAN BODYPANEL THERMAL INSULATION

CFD Analysis R1

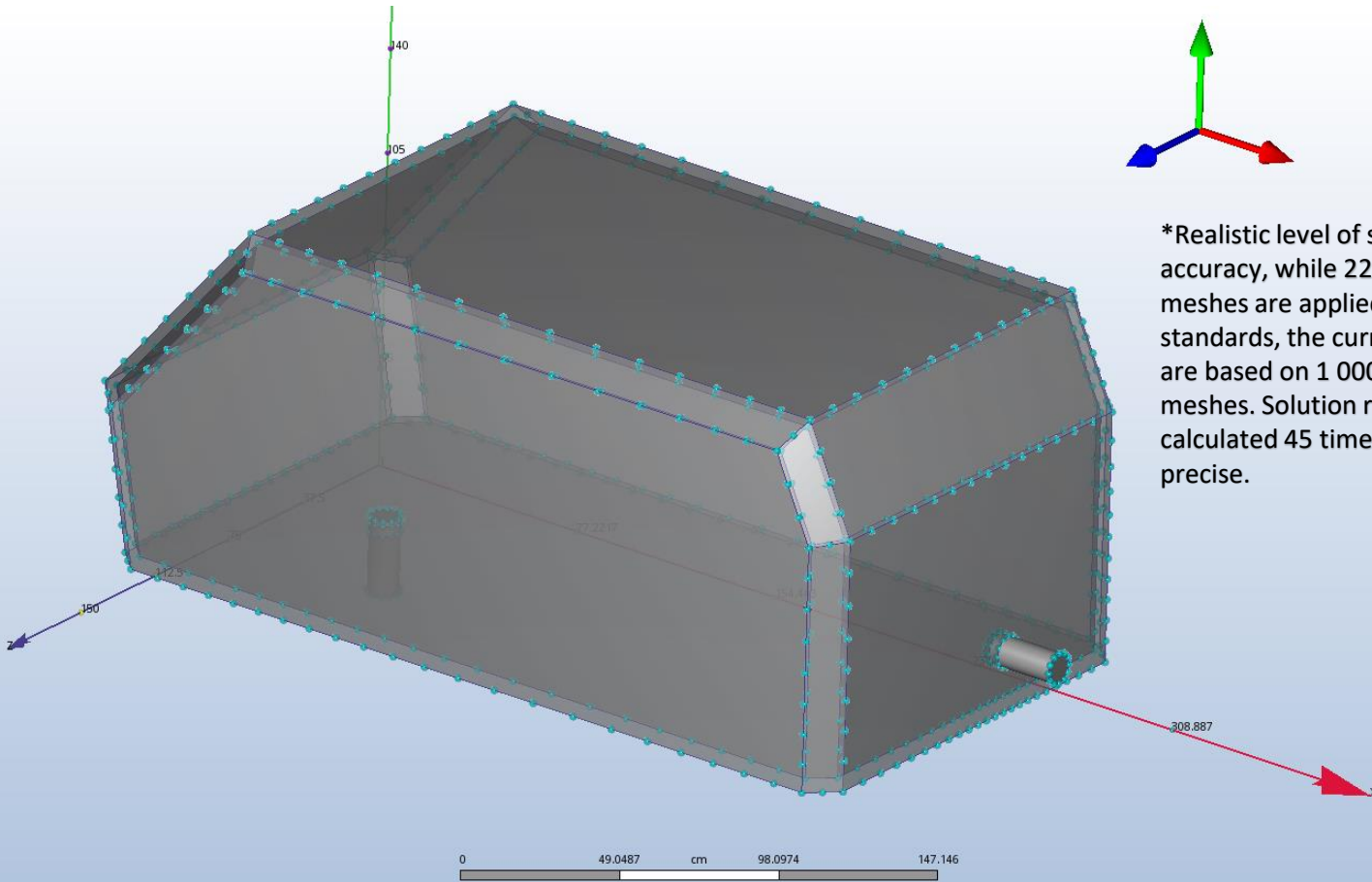
Boundary Conditions

Environment Conditions	Values
Supply Air Flow	350 m ³ /h
Return	0 Pa
Temperature Difference (Δt)	65 °C
Panel Heat Conduction Coefficient	0,032 W/m.K
1.5mm CTP + 30mm EPS + 1.5mm CTP Blowing Temperature = 35 °C Outdoor Temperature = -30 °C Caravan Dimensions 4m x 1.43m x 1.1 m	

Boundary Conditions

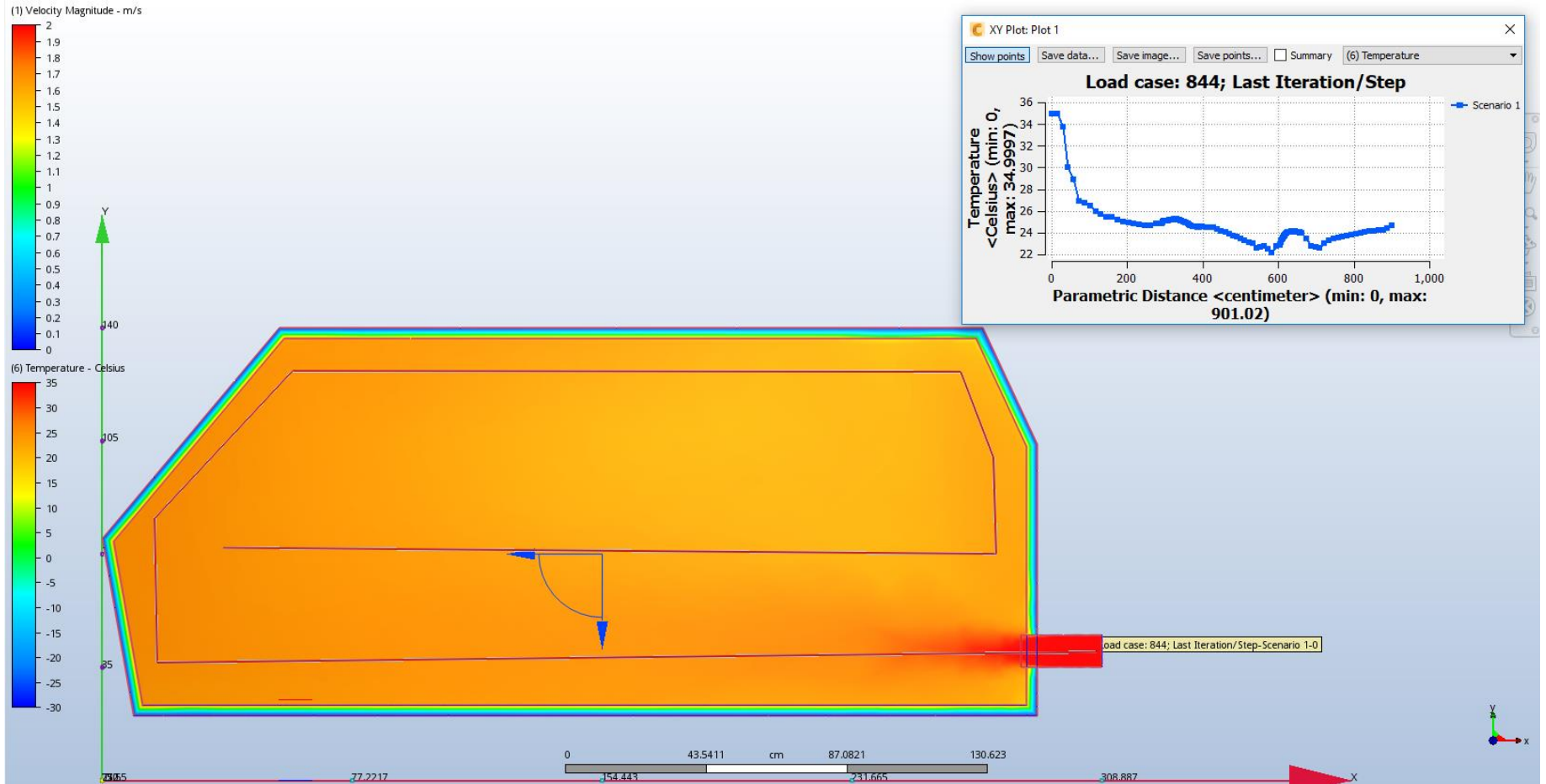


Solution Sensitivity



Mesh \cong 1 000 000

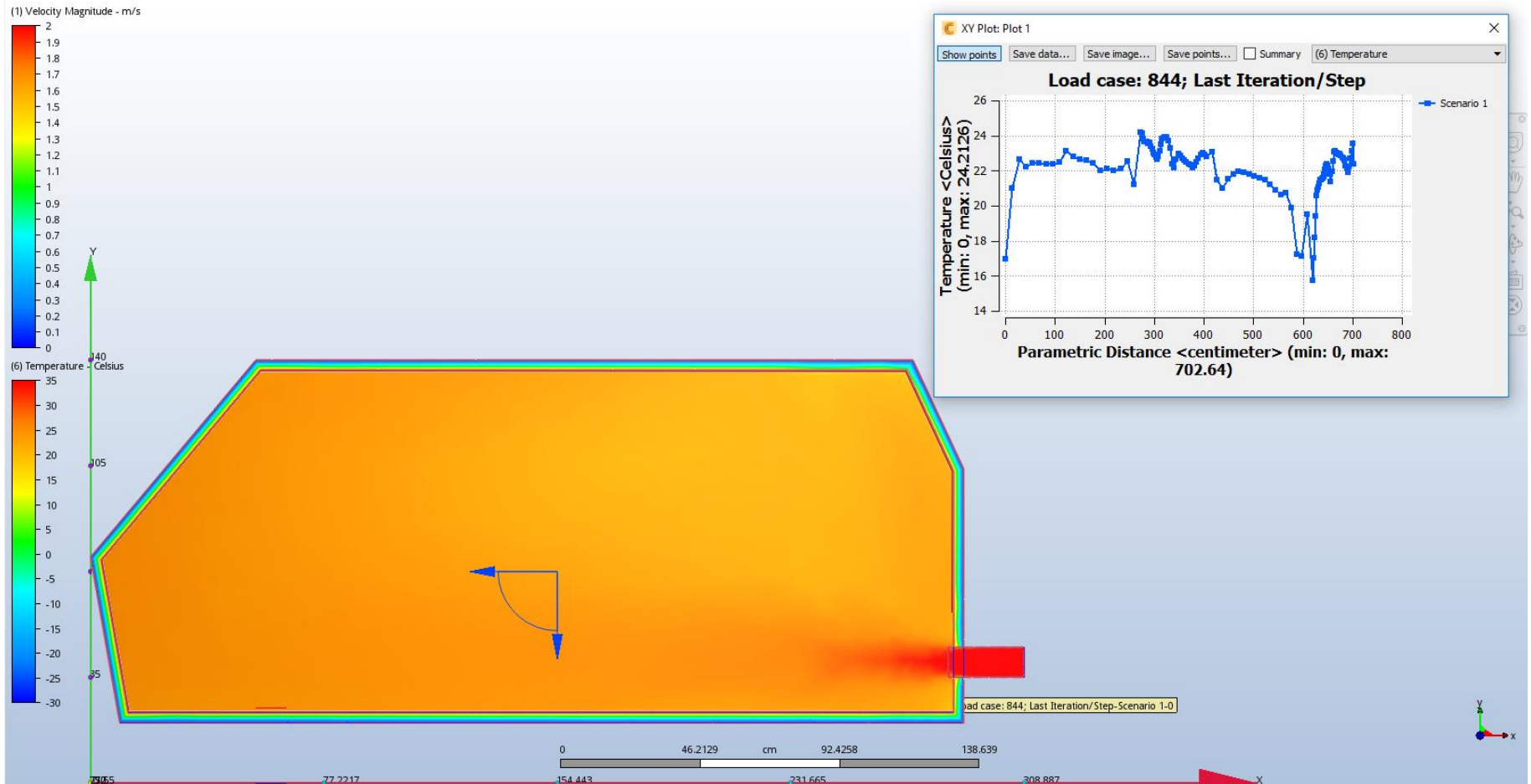
Temperature Distribution



Temperature Unit: °C

Supply Section

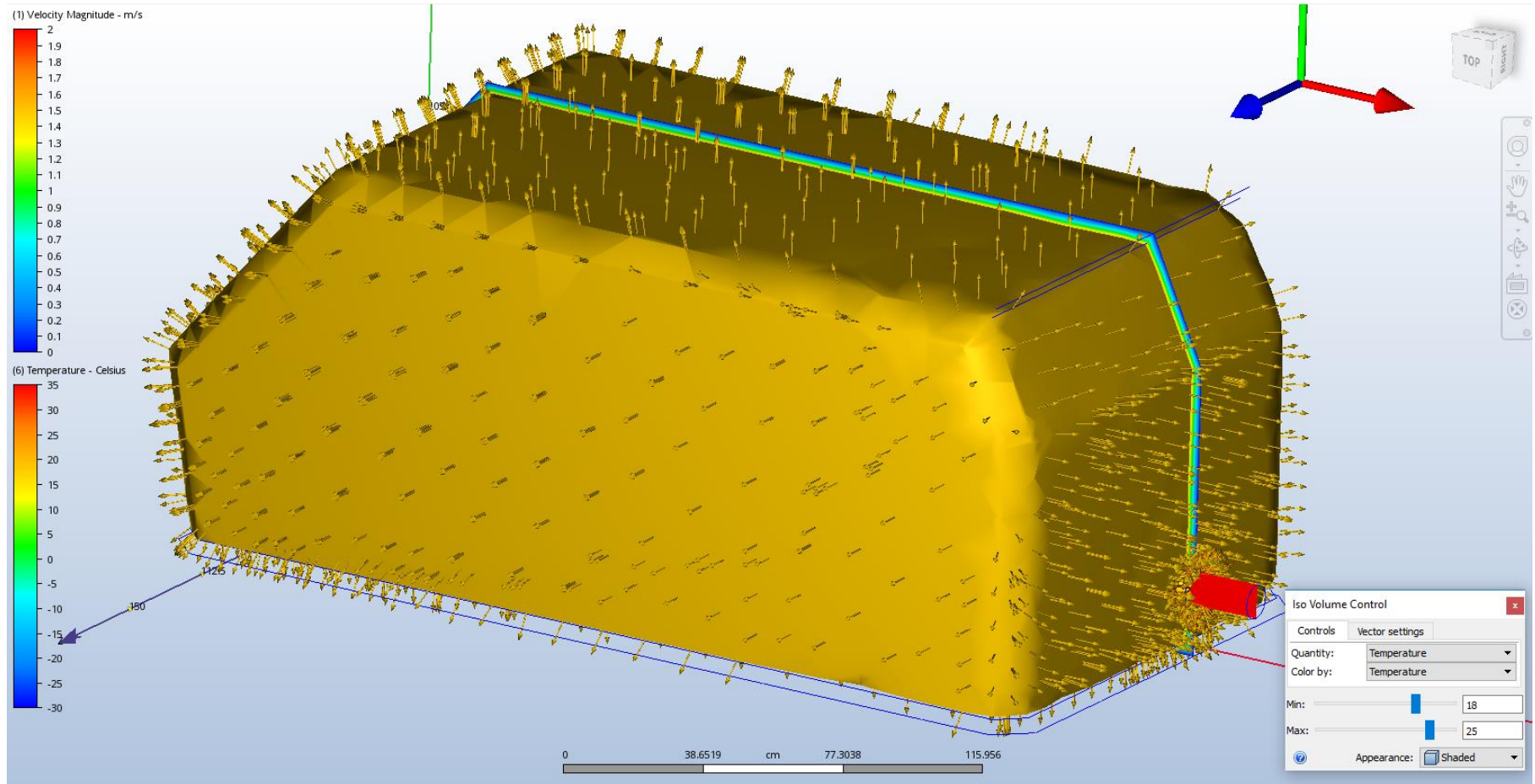
Panel Surface Temperature



Temperature Unit: °C

Supply Section

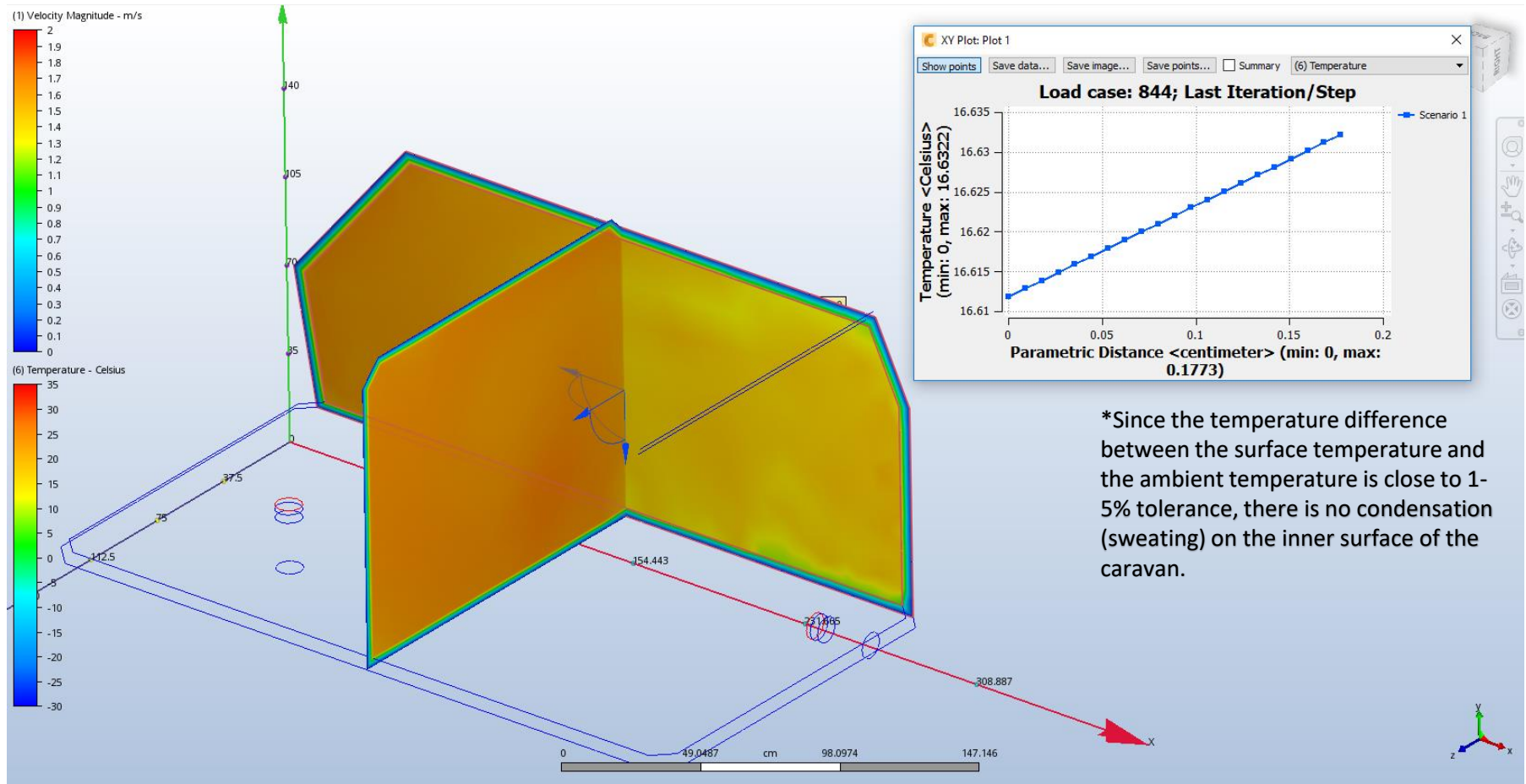
Panel Surface Heat Transfer



Temperature Unit: °C

Supply Section

Panel Surface Temperature

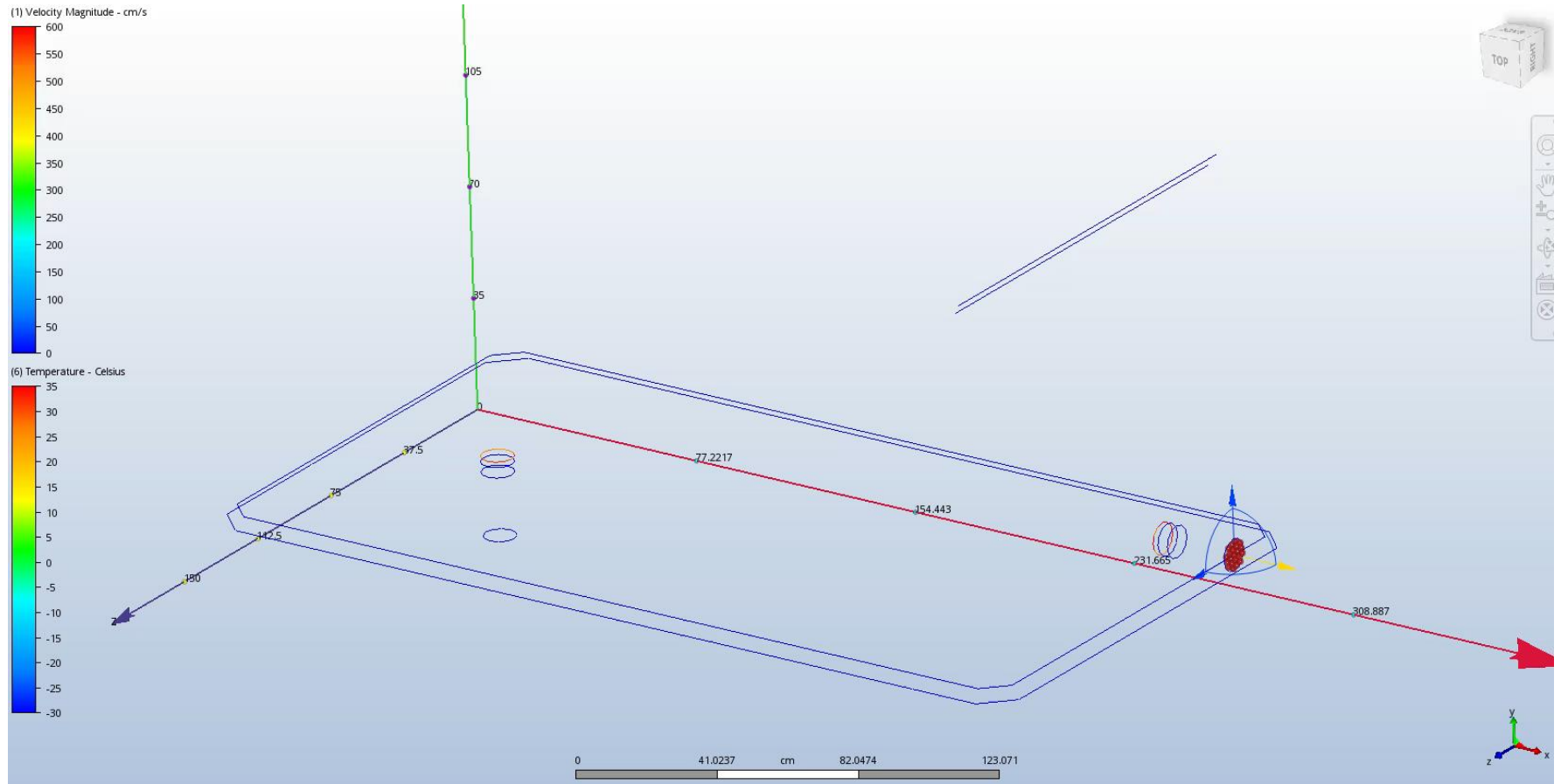


*Since the temperature difference between the surface temperature and the ambient temperature is close to 1-5% tolerance, there is no condensation (sweating) on the inner surface of the caravan.

Temperature Unit: °C

Center and Supply Section

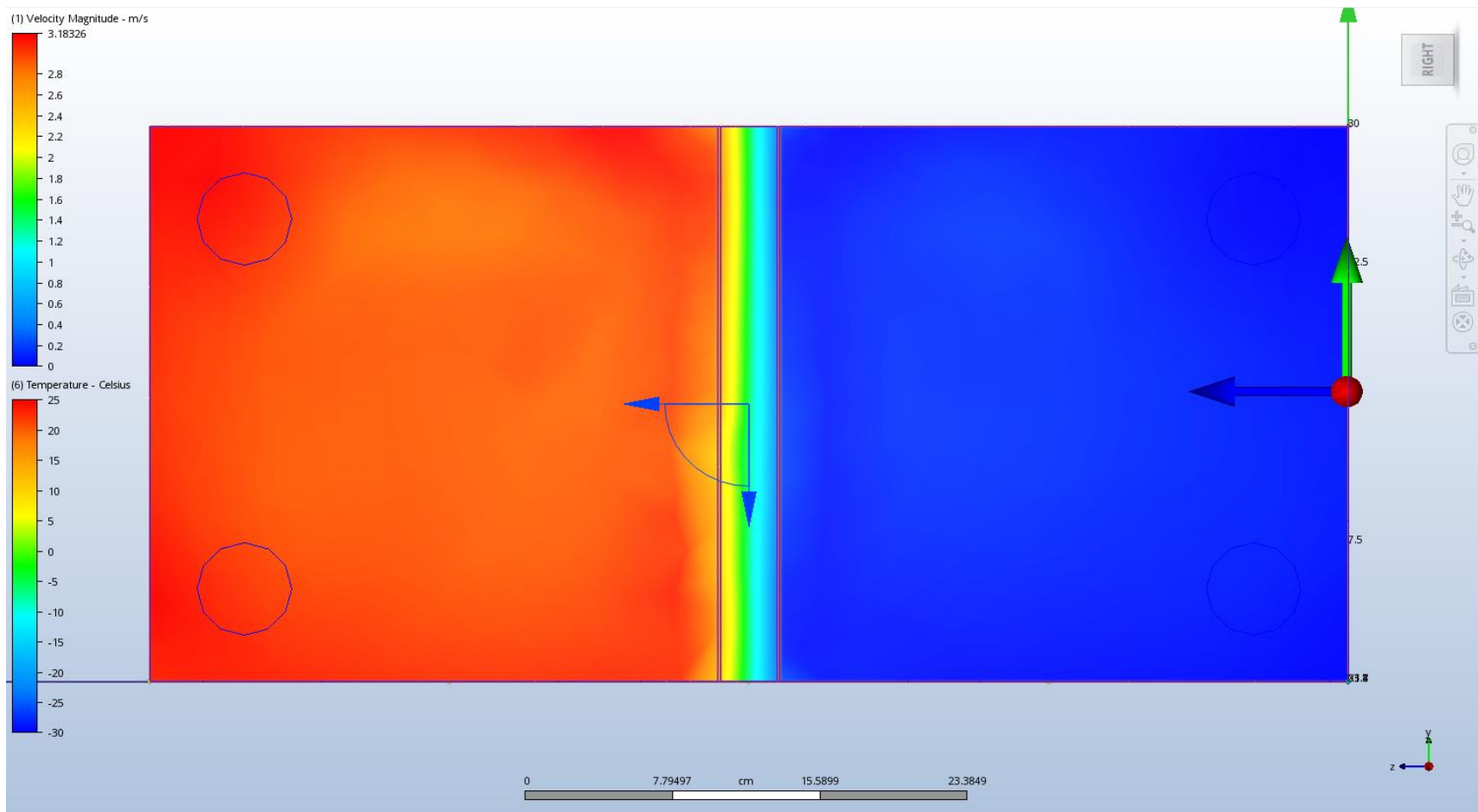
Temperature Particle Distribution



Temperature Unit: °C

All Section

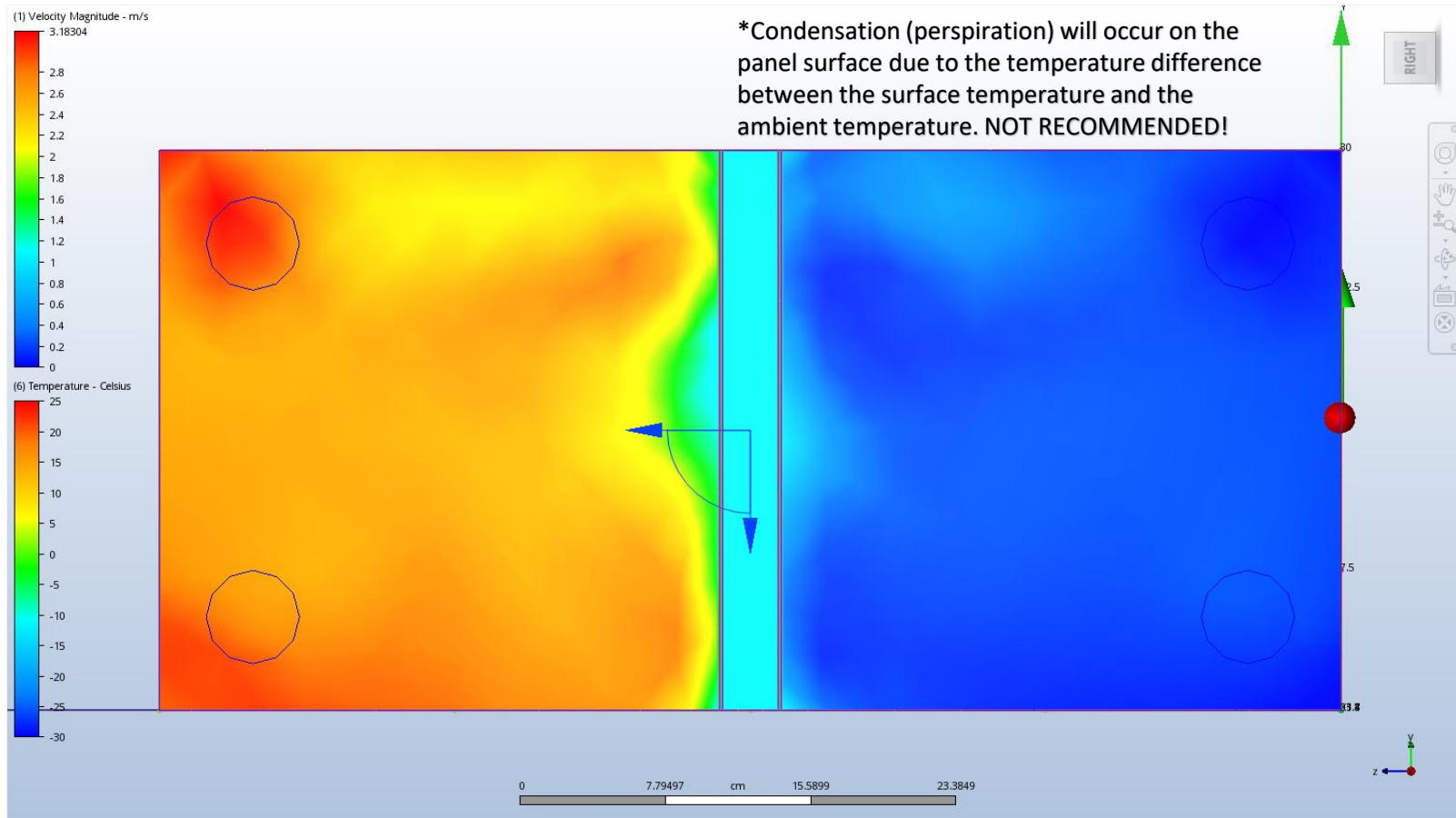
Heat Conduction Result of Test Panel



Temperature Unit: °C

All Section

Heat Conduction Result of Other Test Panel (with Aluminum Frame)



Temperature Unit: °C

All Section

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