

WATER PLATE

Thermal analysis

System analysed

Heat sink = aluminium water cooled plate dimensions 140x18x536 (mm), with copper tubes 10x1 (mm)

Cooling fluid = water - glycol 50 %

Inlet temperature = 60 °C

Flow rate = 10 l/min

Total applied power = 1000 W

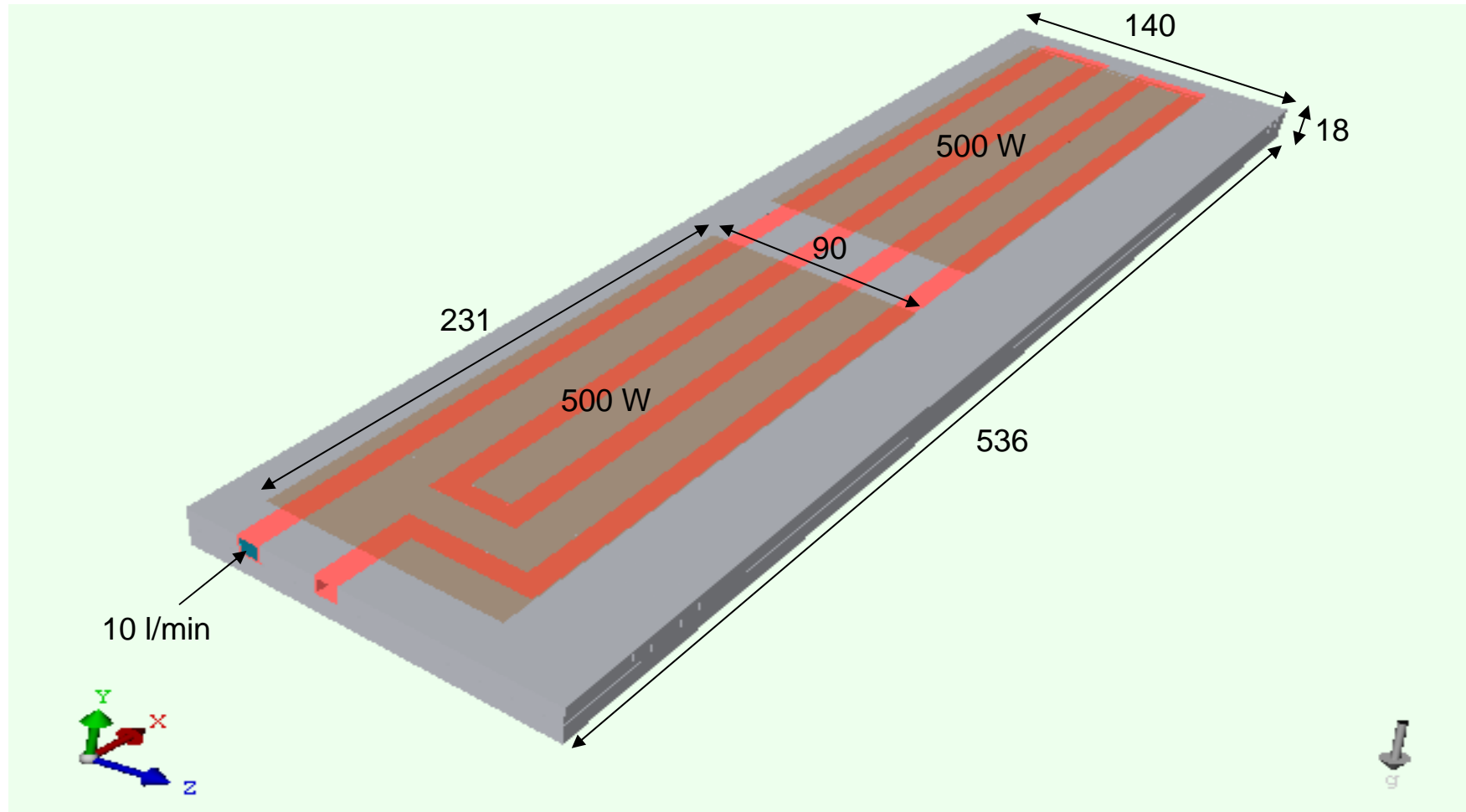
Results

Maximum temperature on the plate = 64 °C

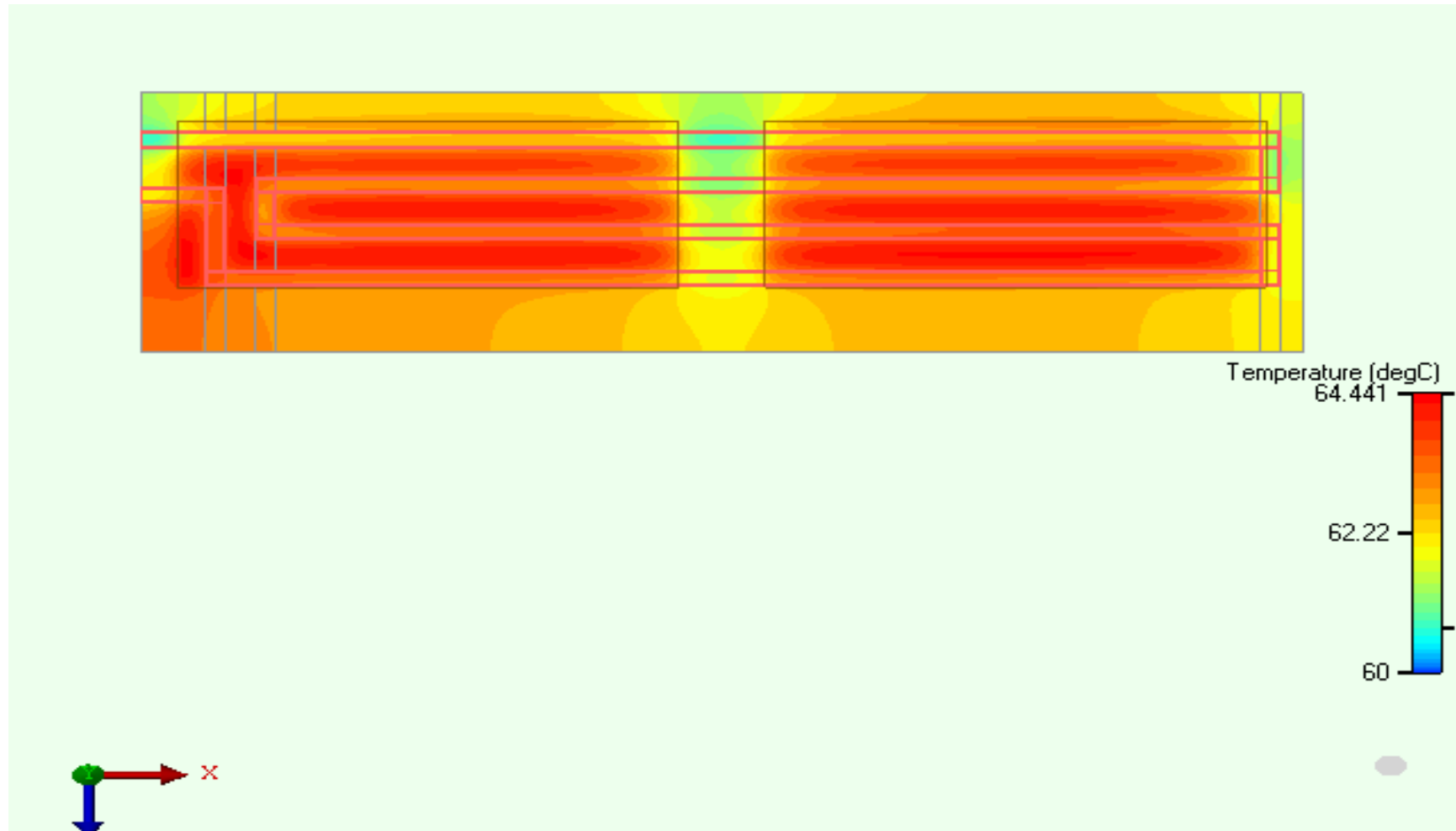
Cooling outlet temperature = 61.7 °C

Pressure drop = 1 bar

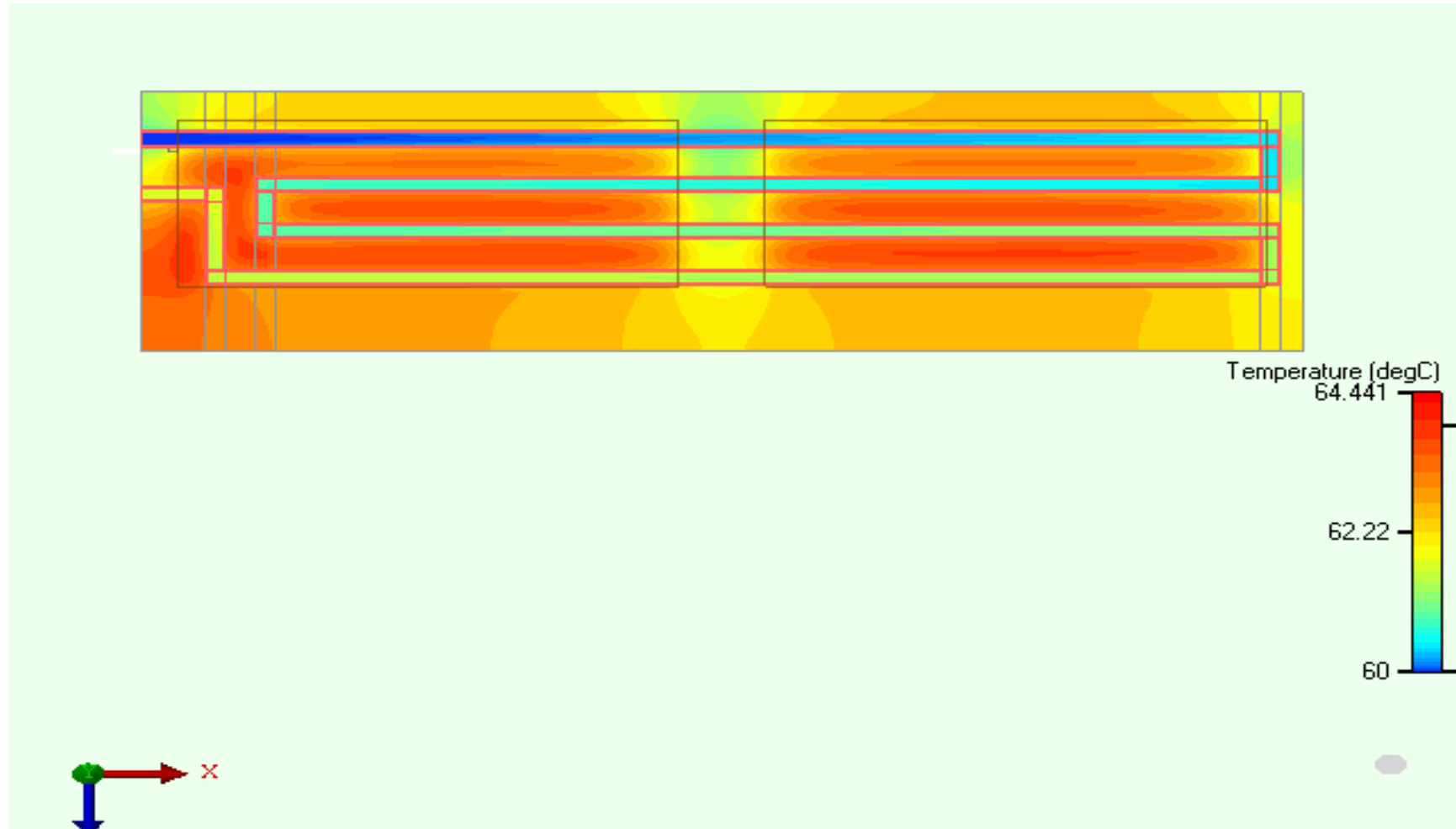
3D model



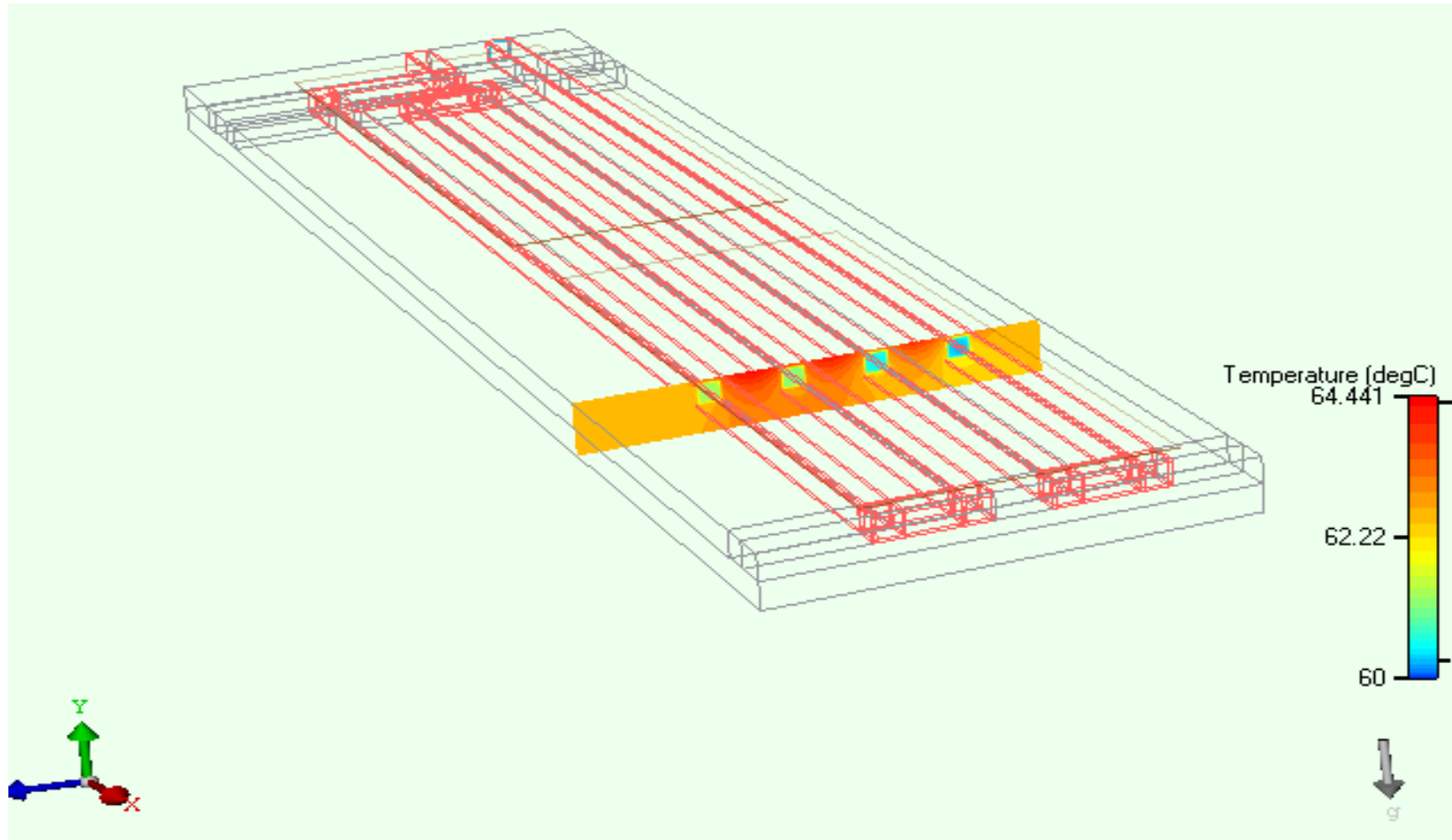
Temperature under the components



Temperature inside the pipes



Temperature on a section



Pressure drop

