Material Properties Cu (from Material Library)	Transient thermal analysis
Kxx (Conductivity)	400 W/m K
Density	8700 kg/m^3
C	385 J/Kg K

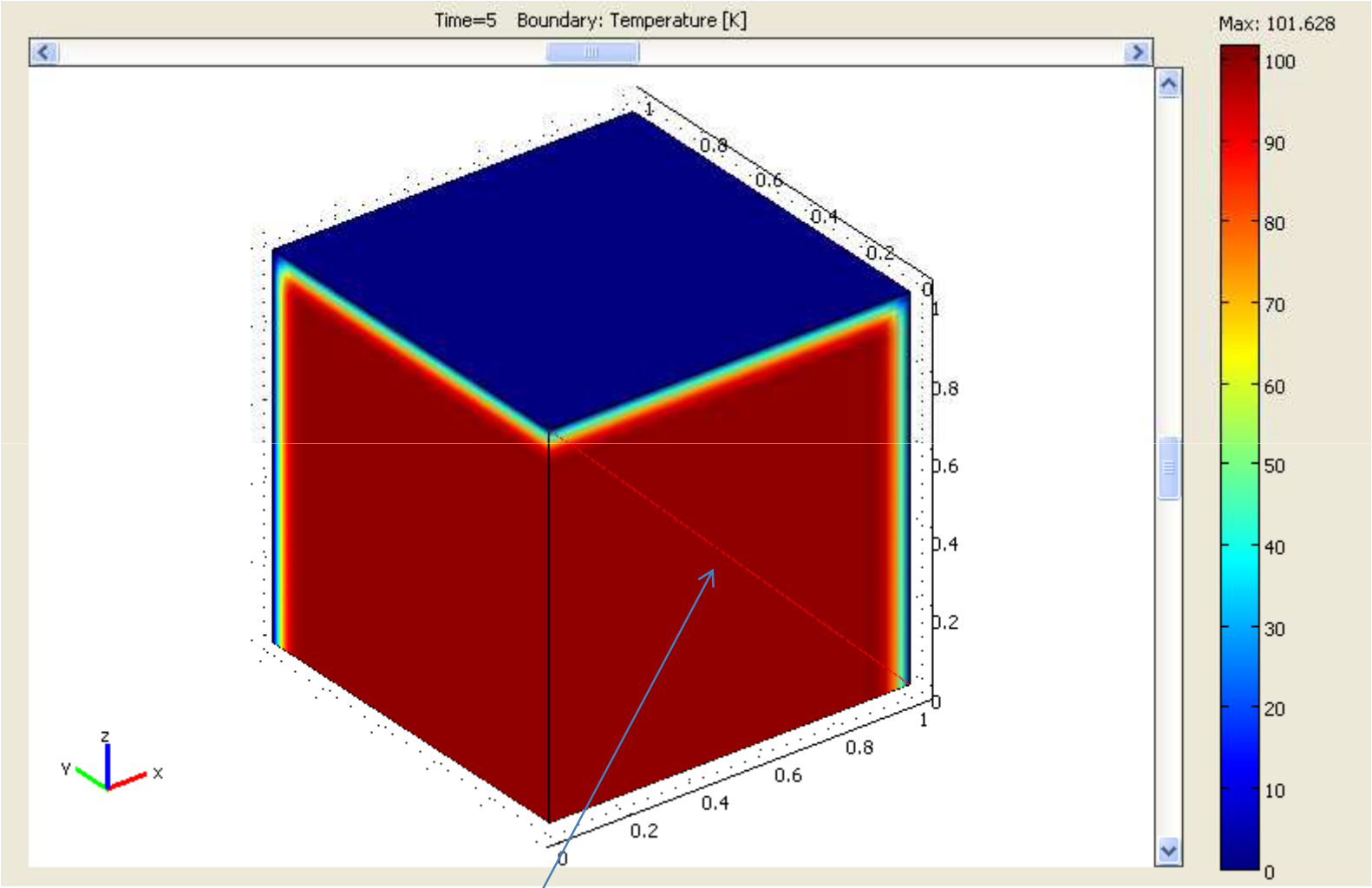
Mapped mesh extruded from 2D geometry (55X15X17) edge divisions for length, width and height)
Problem :
A solid rectangular block made of copper.
The inside is all at 100, the outside is all at 0
This is a $1/8^{th}$ geometry of a complete block
hence, only three outer faces are set at 0 here

Initial condition is 100 K on all geometry
Boundary conditions (all outer boundary) are back three faces T=0
Checking the temperature distribuiton after time 5 sec

Mesh: I tried using a finer mesh at the outer boundary and coarser mesh towards the center using the element ratio option since, there is a sudden jump in the temperature towwards the edge.

Even in that case, the final plot showed the max T as 123 K!!

Boundary plot shows maximum temperature is 100 or close to 101.628



Extrusion plot corresponding to this line (x0,y0,z1) to (x1,y0,z0) is on next slide

Extrusion plot shows it as 112!!
There is no external or internal heat source, or no convection heat transfer.
The temperature distribution is supposed to be within 0 and 100