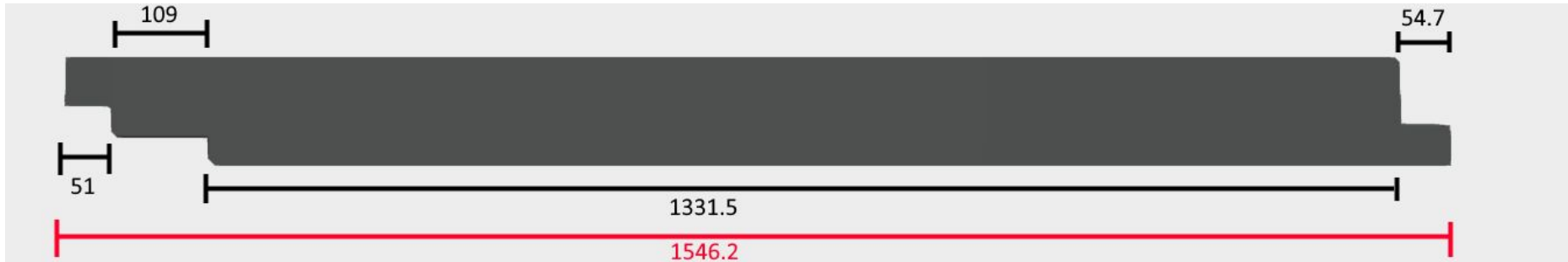


ICS - It's Complicated Sadly

John Waiton

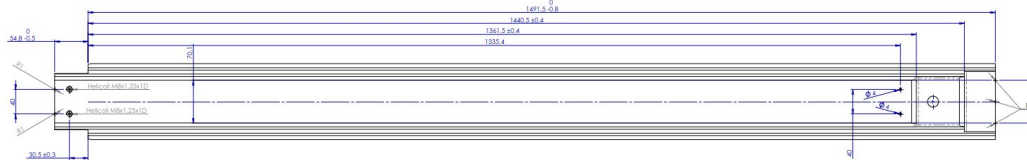
Full length measurements first (everything mm)



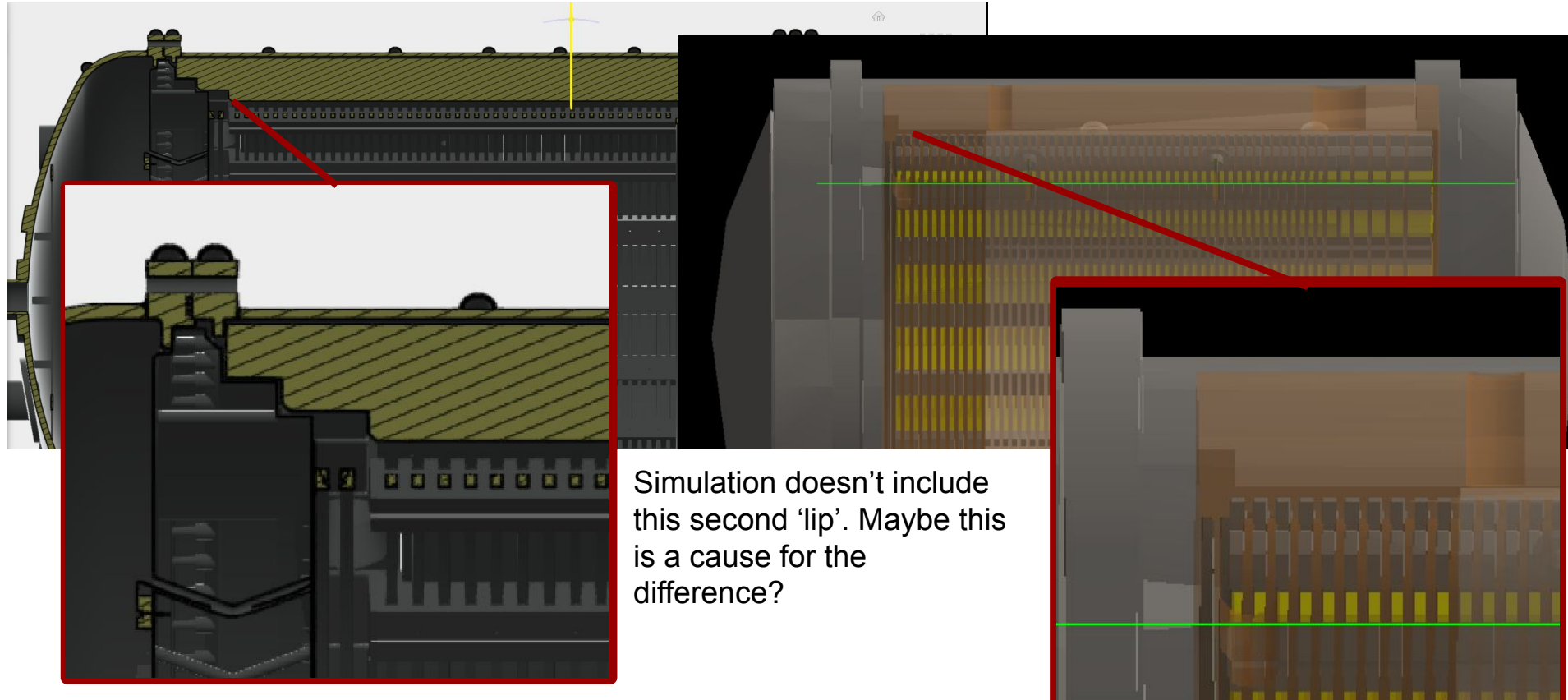
Singular copper bar in drawings, full length 1546.2

Copper Shielding length in simulation: 1484.3

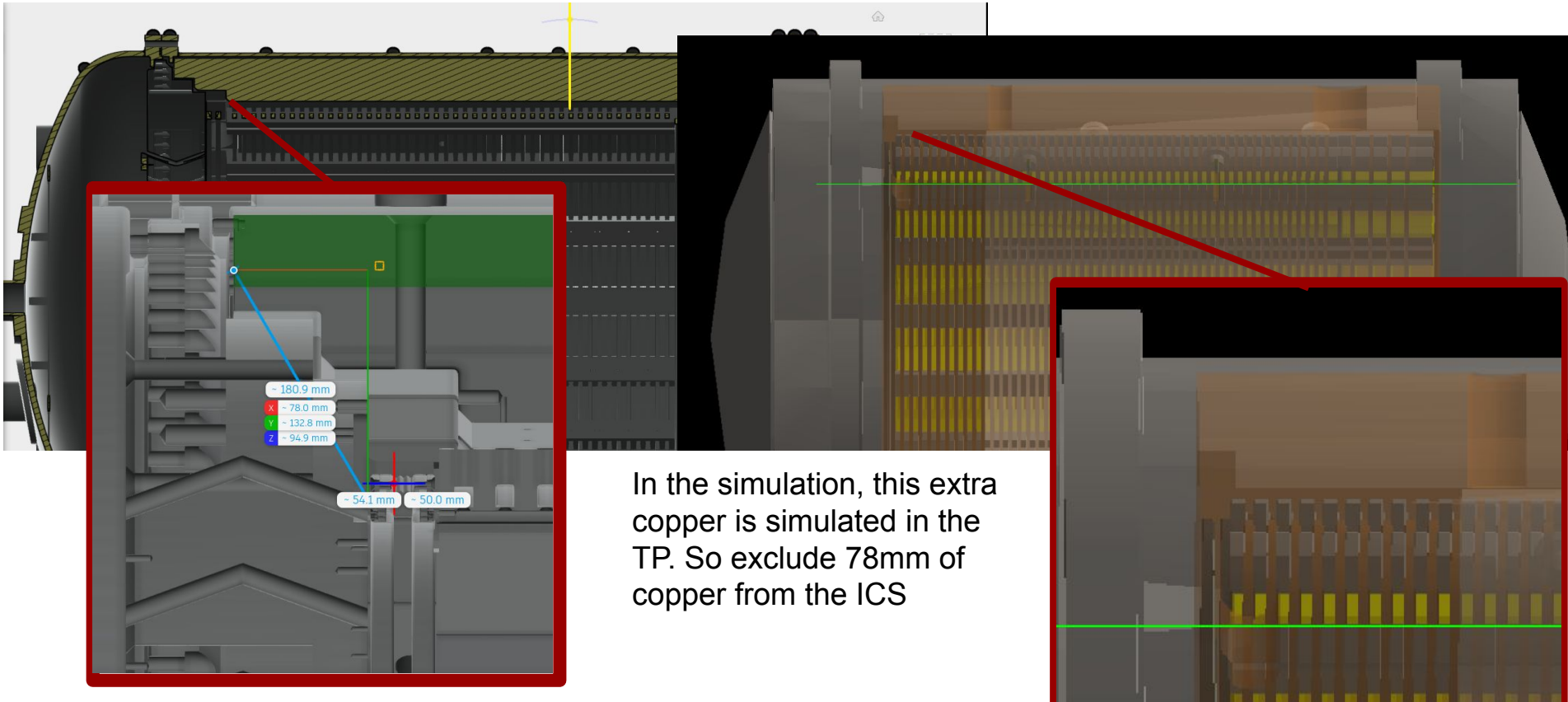
Discrepancy of 61.9. Why?



Sim/drawing comparison, TP side



Sim/drawing comparison, TP side



Keeping count

1546.2mm (true length) - 78mm = *1468.2mm*

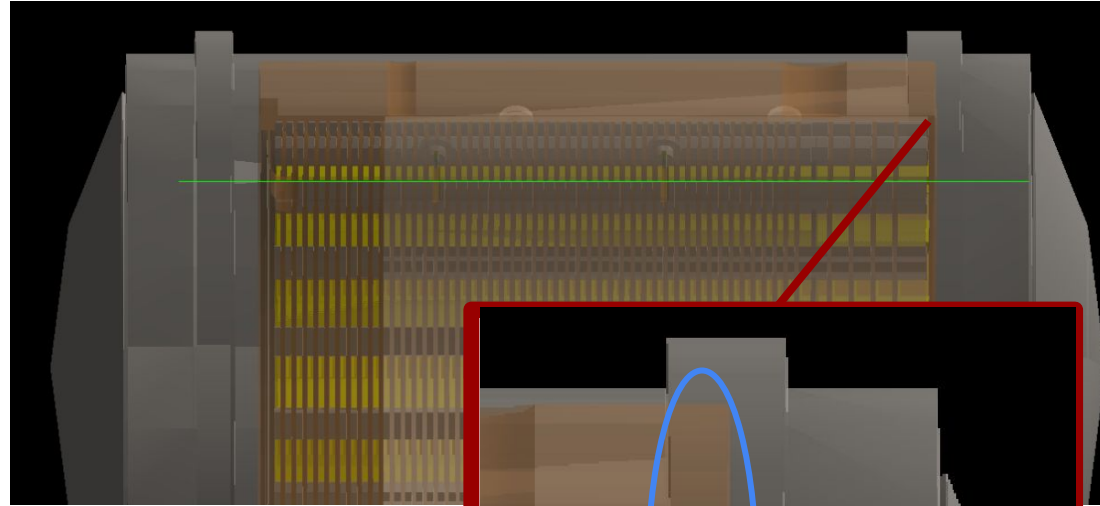
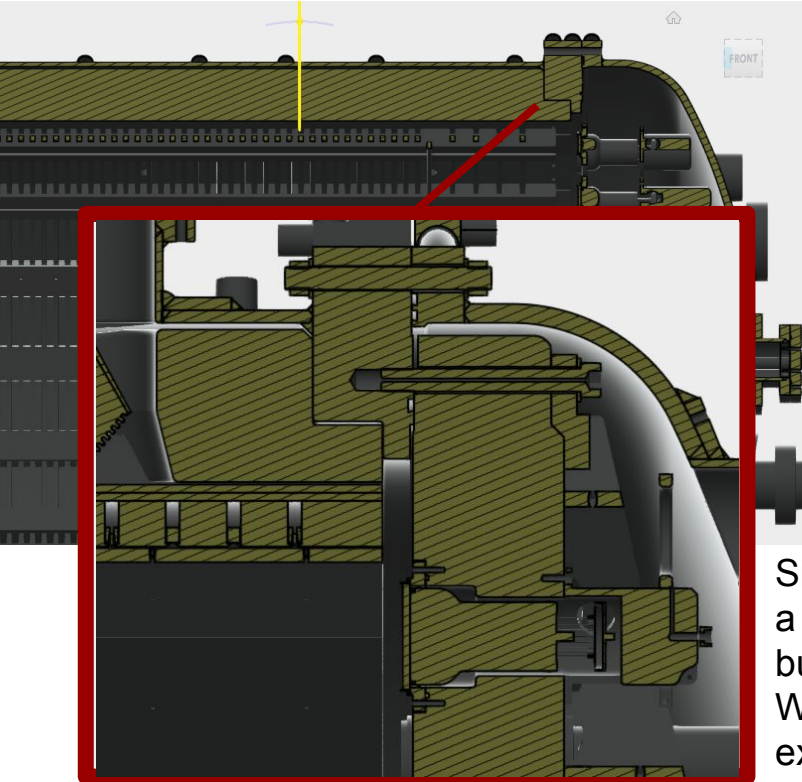
expected length in sim

1484mm

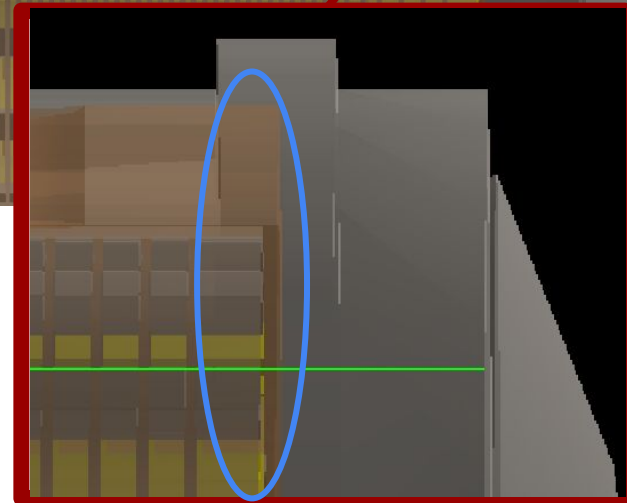
true sim length

Discrepancy of simulation makes ICS too long by 15.8mm

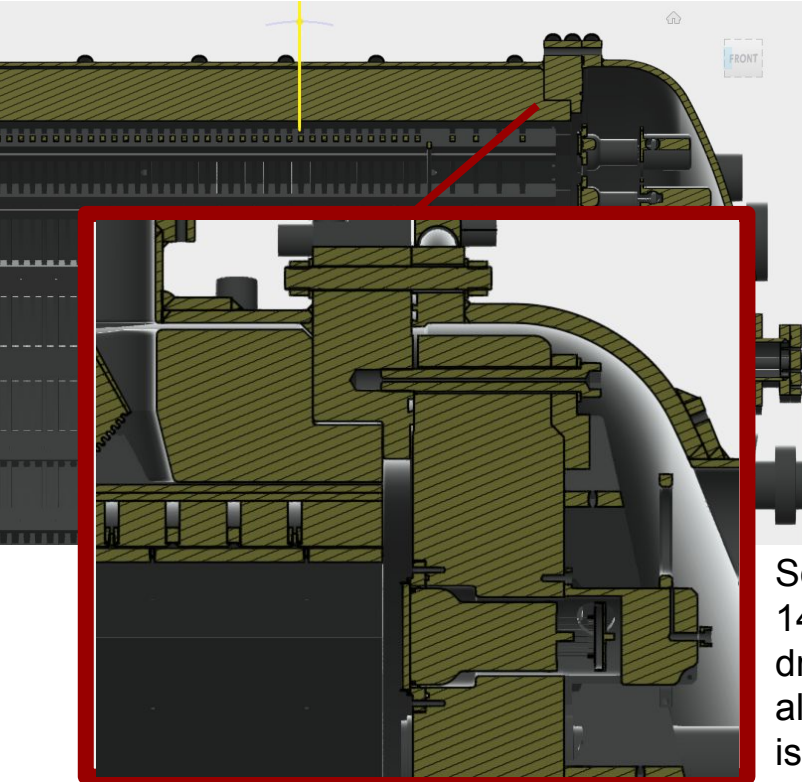
Sim/drawing comparison, EP side



Simulation doesn't cut out a chunk like the drawings, but that's unimportant. What is important is this extra copper in the ICS (blue circle)

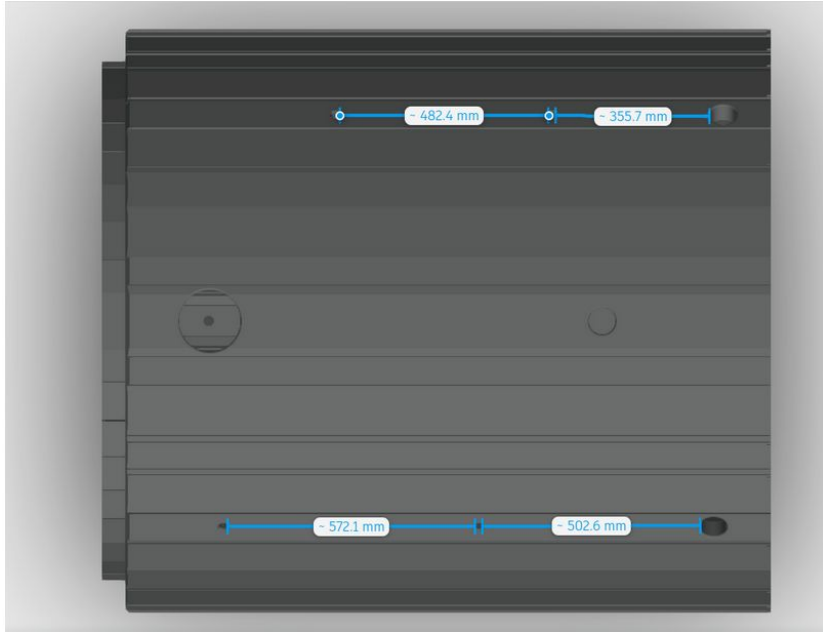


Sim/drawing comparison, EP side



So we reduce ICS length to 1468.2mm in sim (to match drawings) and the ICS is aligned with the staves (as is in drawings and reality)

Aligning feedthrough ports



Simulation had feedthrough and calibration ports aligned incorrectly with drawings. This has been corrected.

