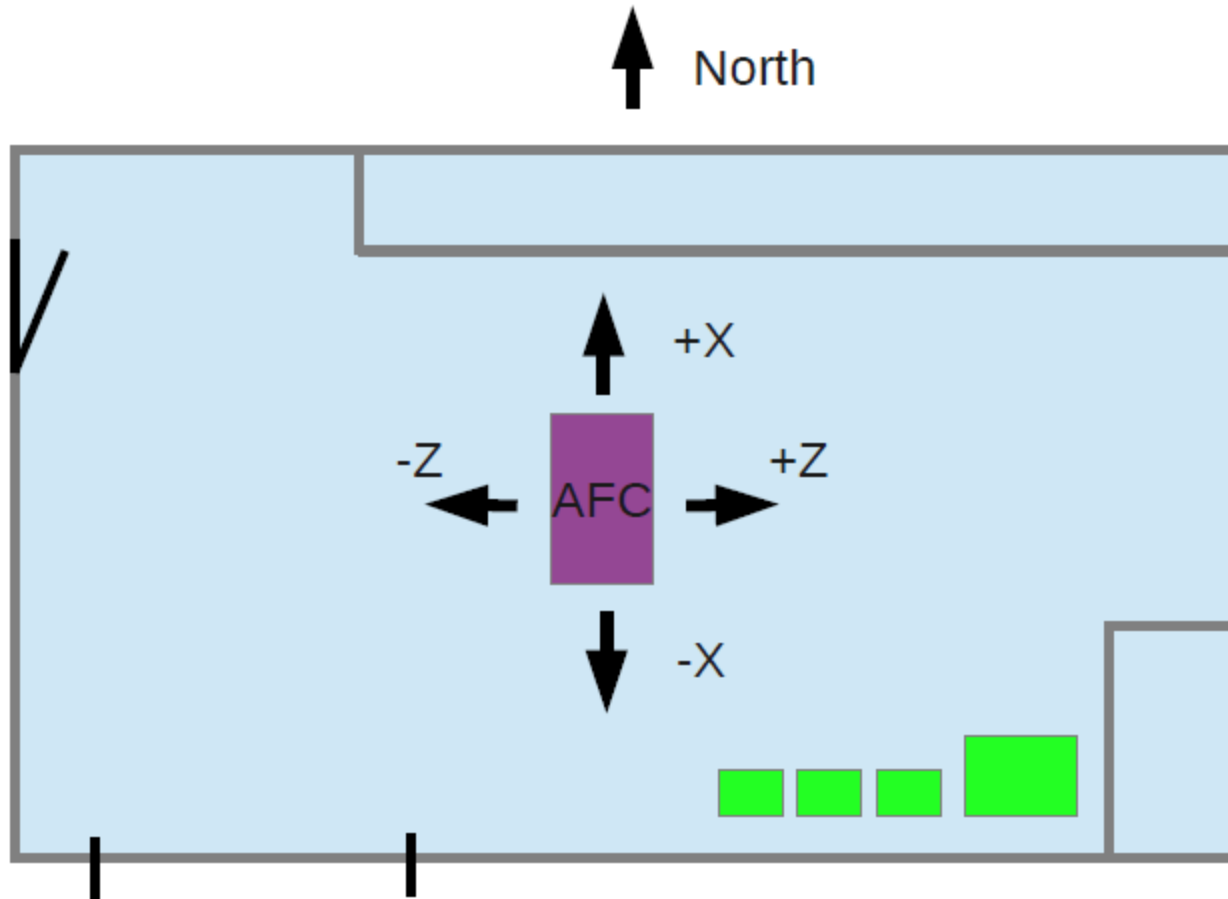


R9 Model Comparisons

- Further comparisons performed for new models from Melissa.
- Currently best agreement is seen in model using mild steel walls, improved meshing, and all fields calculated using integral fields.
- Clear improvement over both models presented last week.

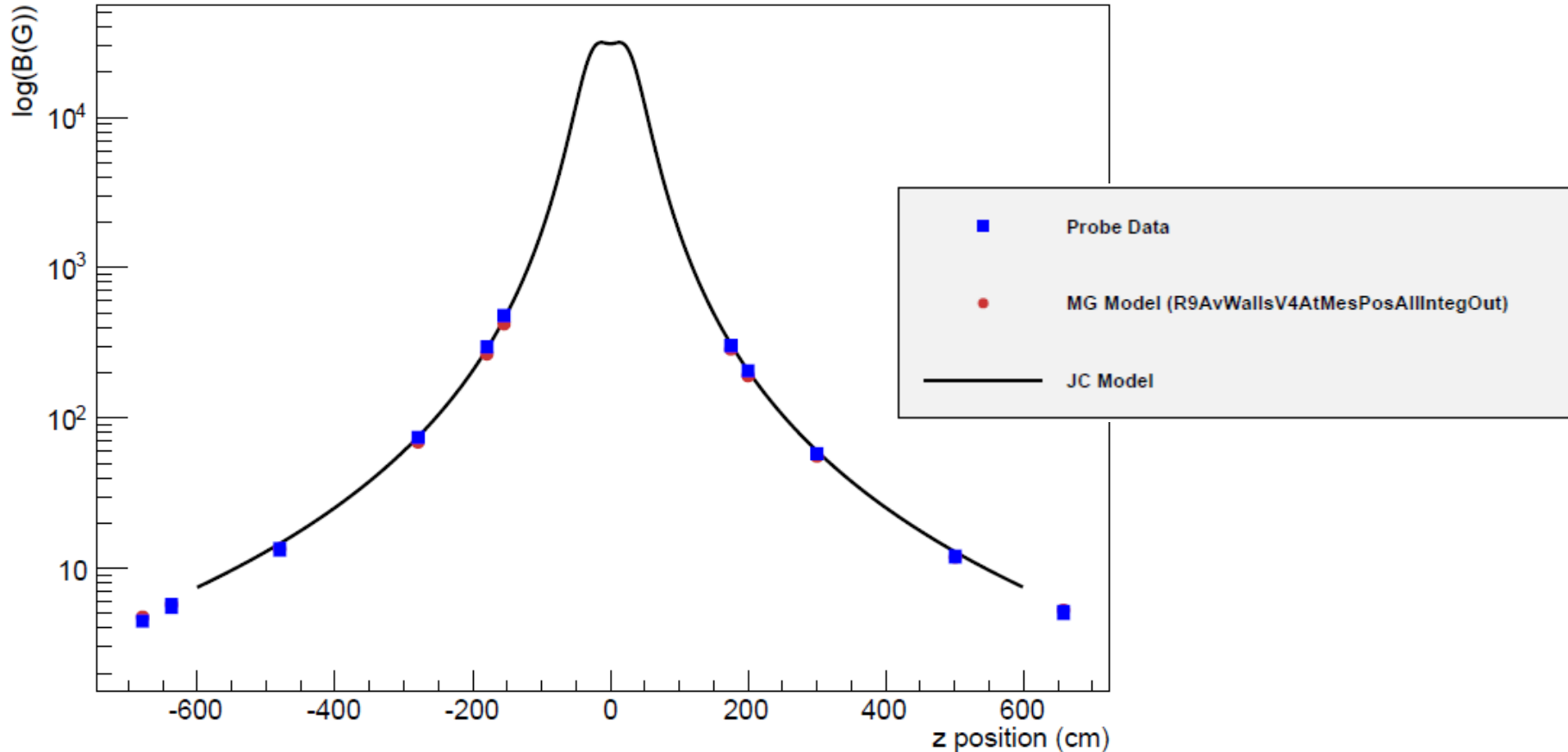
Reminder of hall layout :



In following slides, $y=0$ is taken to be at the centre of the bore.

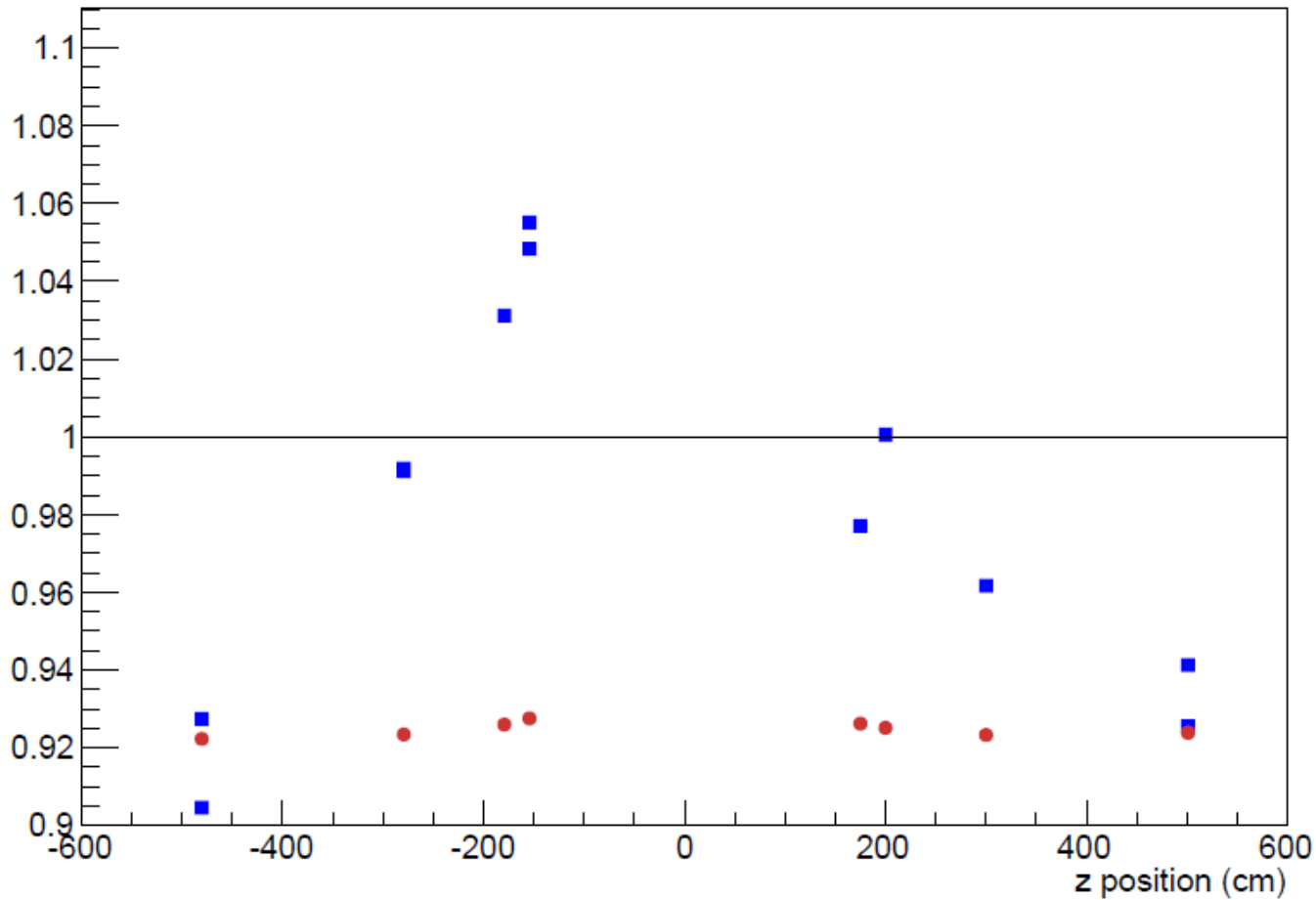
Field at bore height along z axis (for model V4 using integral fields for all fields)

Comparing model data to probe data at $x=0, y=0$



Blue points are measurements, red points are from Opera model, black line is Biot-Savart prediction.

Field at bore height along z axis

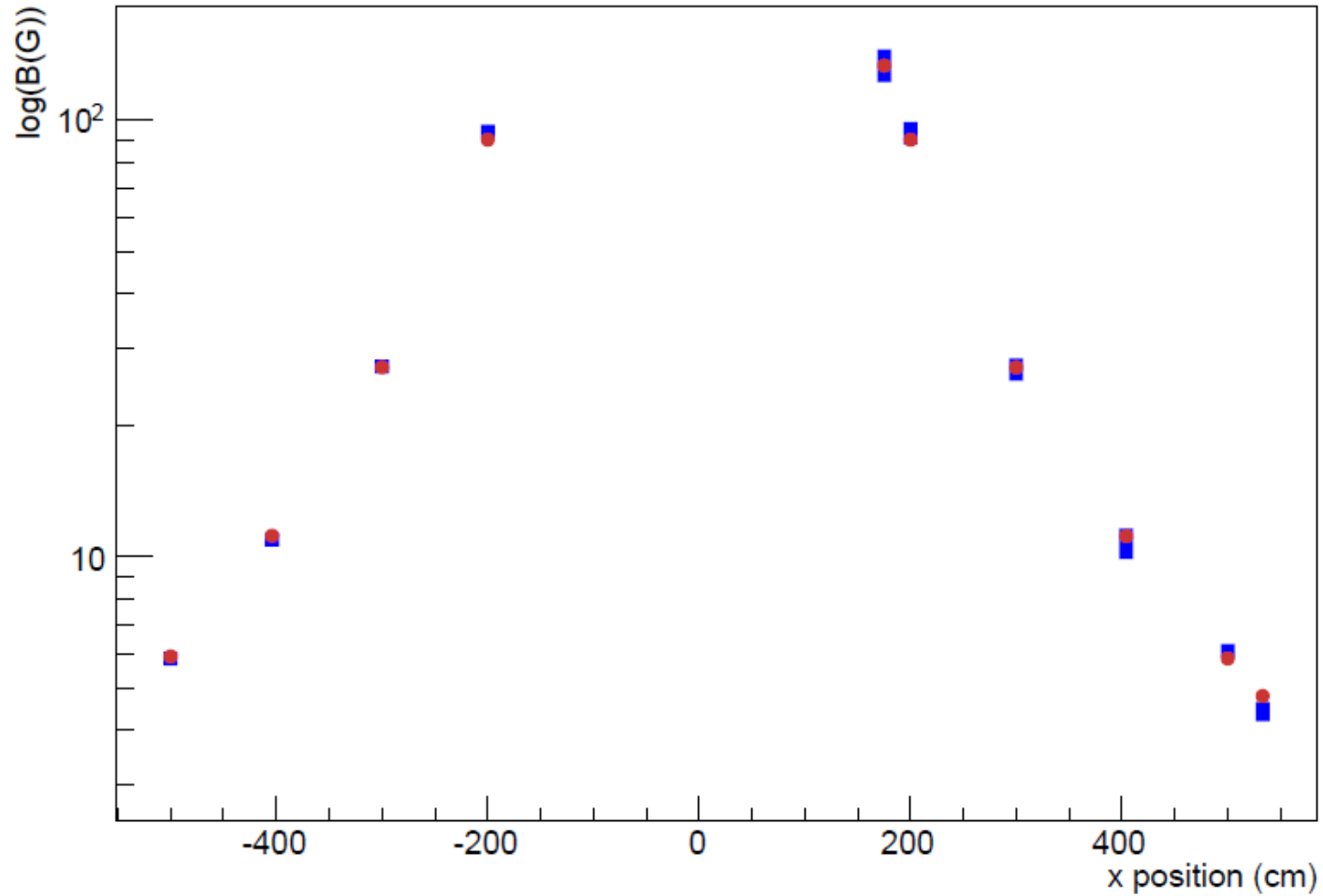


Blue points are measurements, red points are from Opera model, black line is Biot-Savart prediction. Model and probe data are shown relative to B-S prediction

Additional Plots

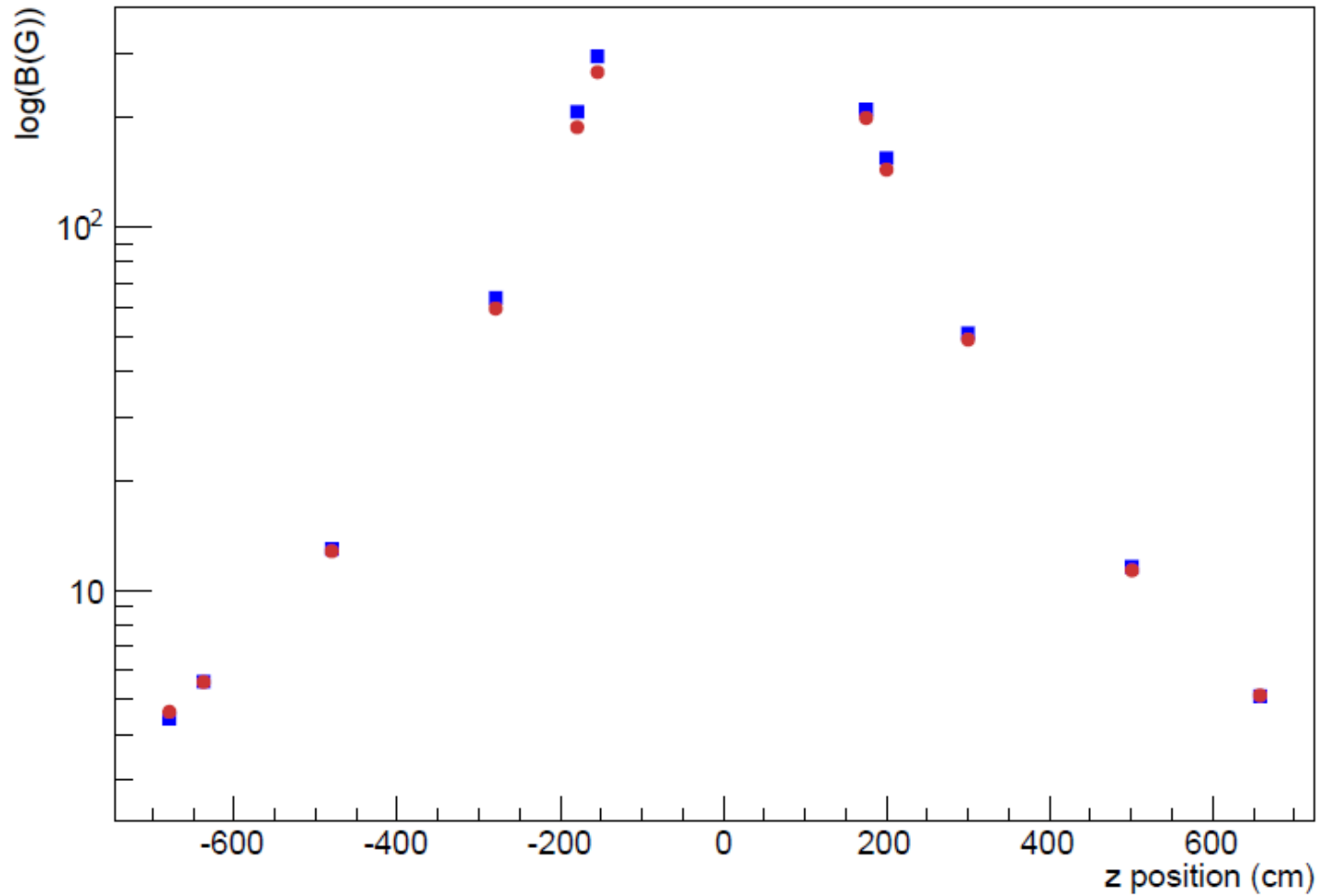
Field at bore height along x axis

Comparing model data to probe data at $y=0, z=0$



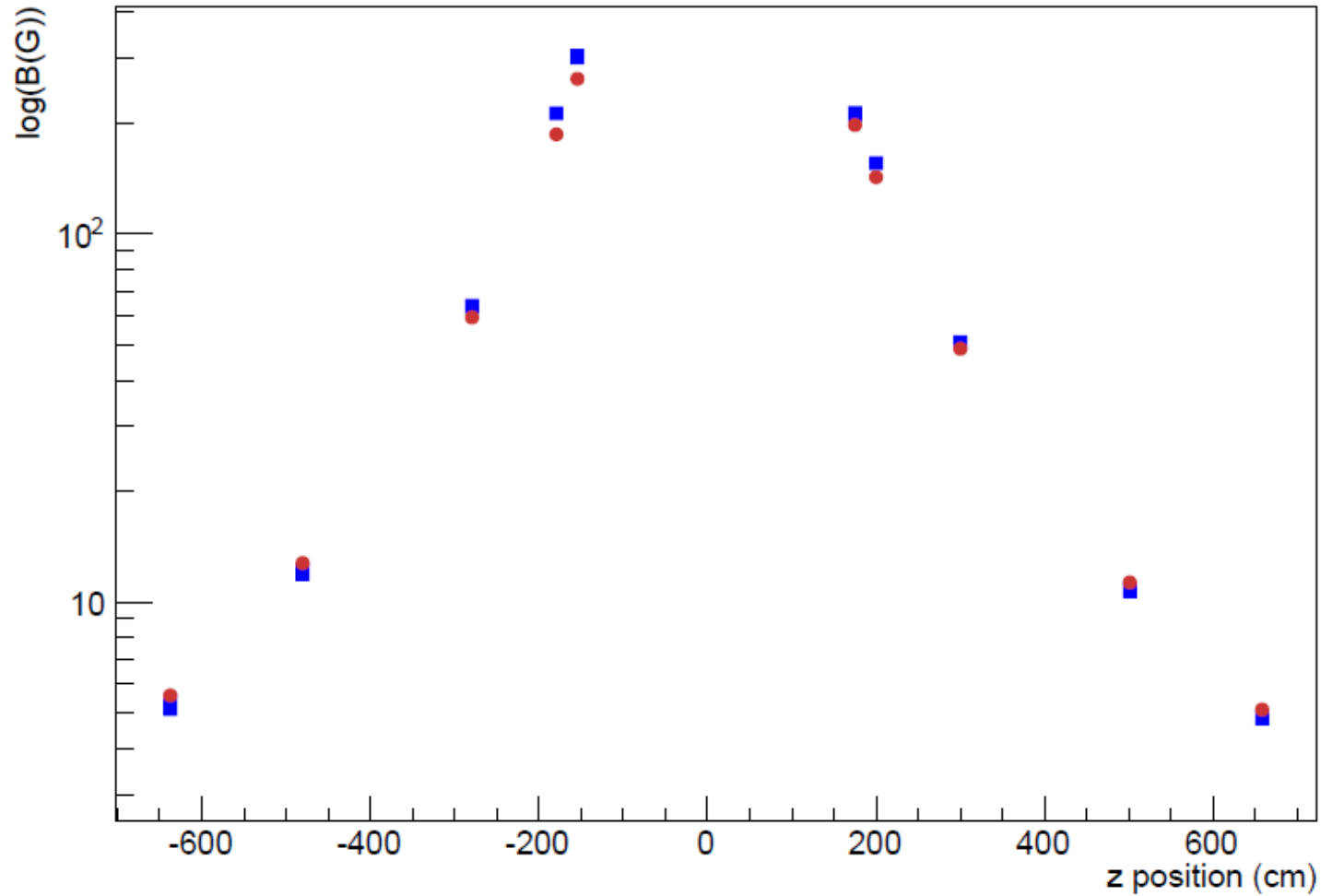
Field along z axis at +80cm from bore

Comparing model data to probe data at $x=0$, $y=80$ cm



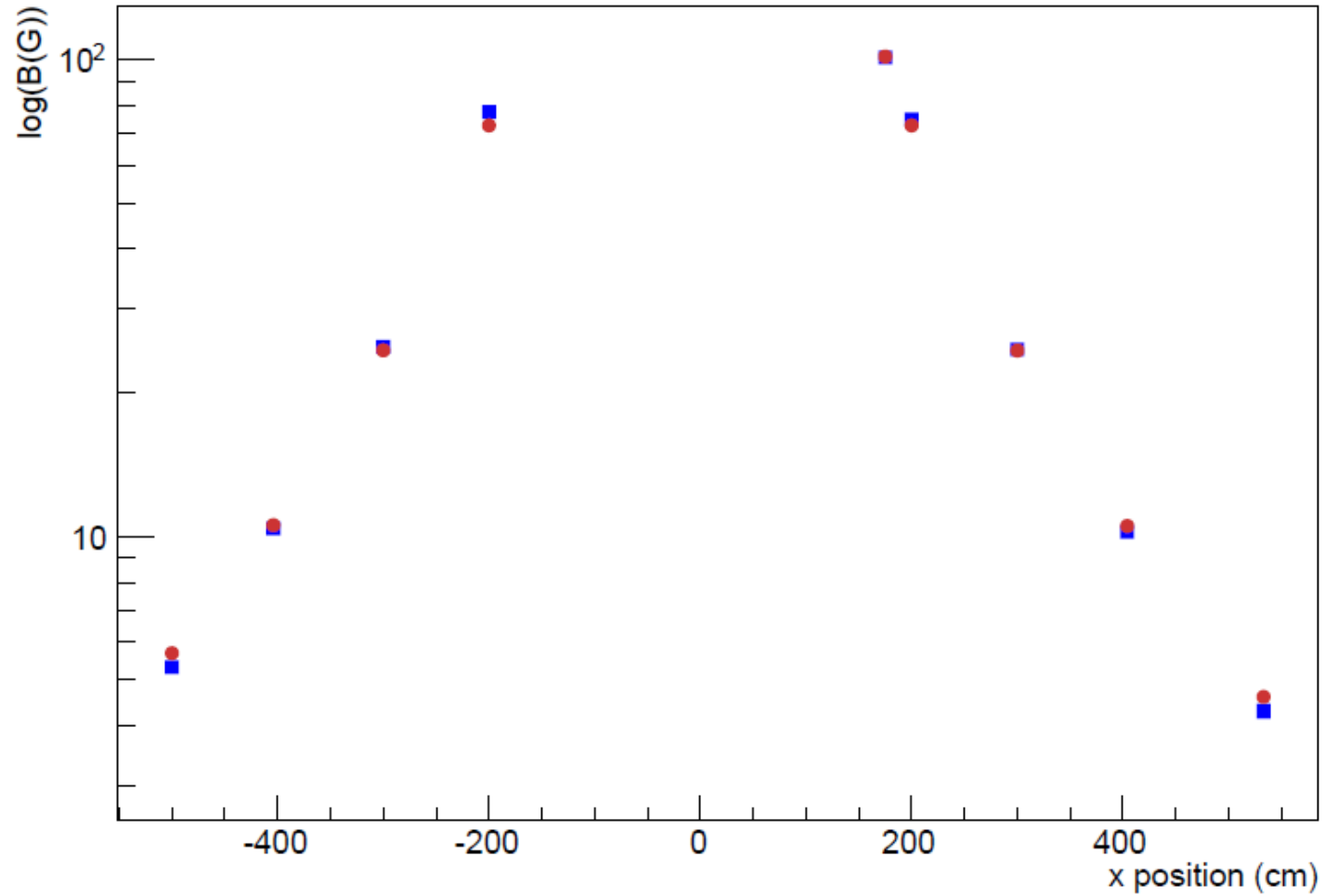
Field along z axis at -80cm from bore

Comparing model data to probe data at $x=0$, $y=-80$ cm



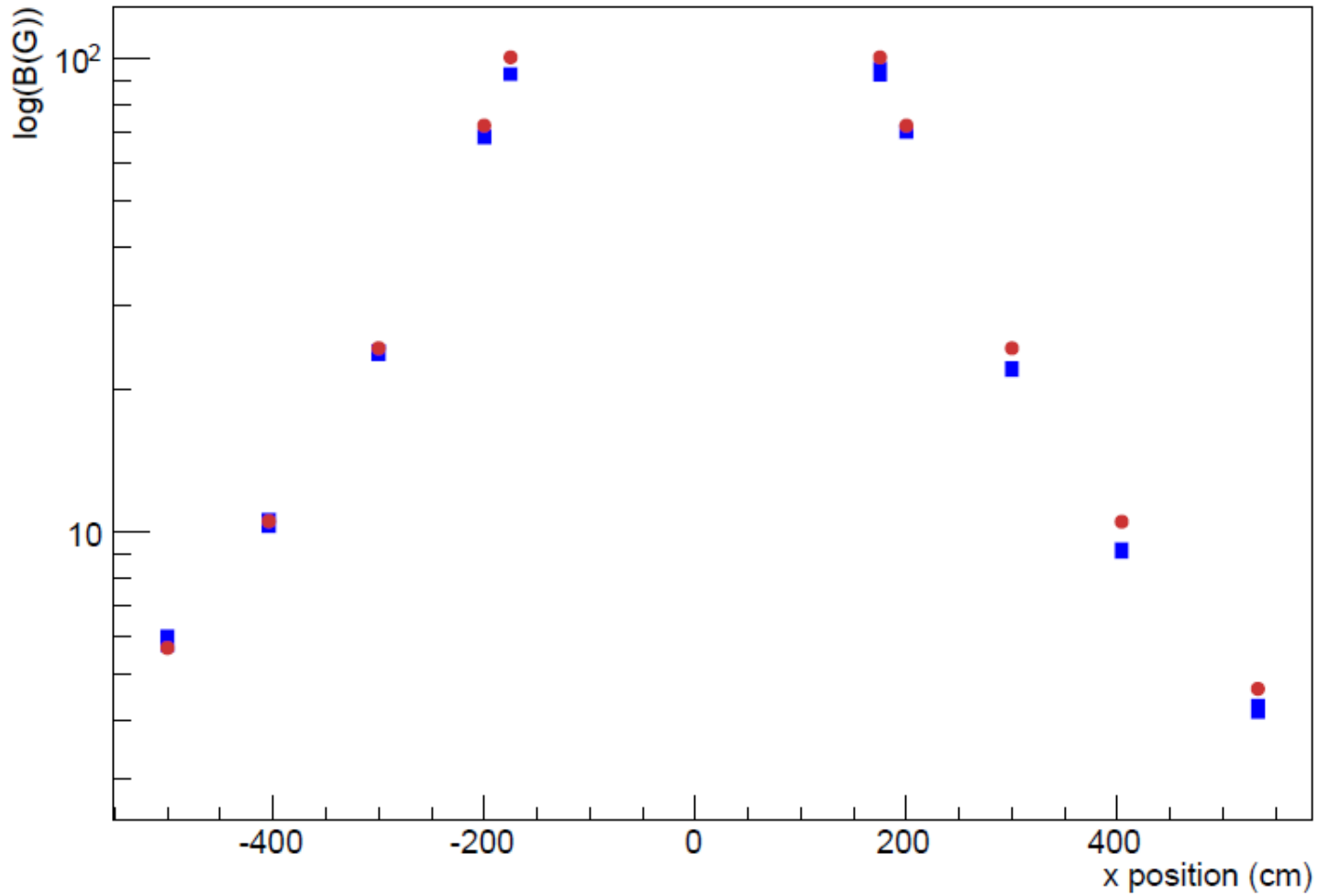
Field along x axis at +80cm from bore

Comparing model data to probe data at $y=80\text{cm}$, $z=0$



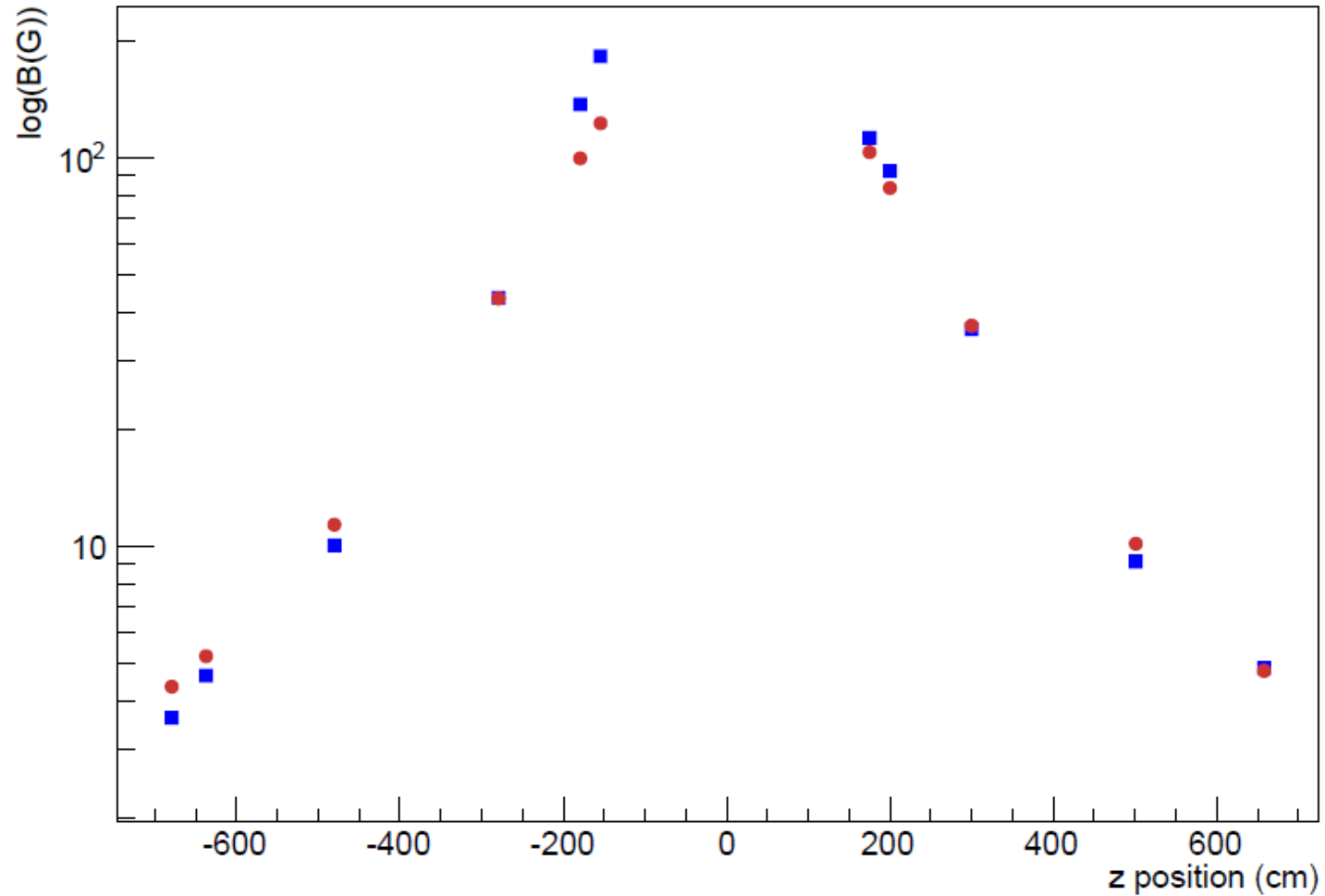
Field along x axis at -80cm from bore

Comparing model data to probe data at $y=-80\text{cm}$, $z=0$



Field along z axis at -147.4cm from bore

Comparing model data to probe data at $x=0$, $y=-147.4$ cm



Field along x axis at -147.4cm from bore

Comparing model data to probe data at $y=-147.4\text{cm}$, $z=0$

