Mapper, Magnet, Power Supply in Test Lab
View from rear of magnet

SWEEP MAGNET MAPPING DATA & PLAN

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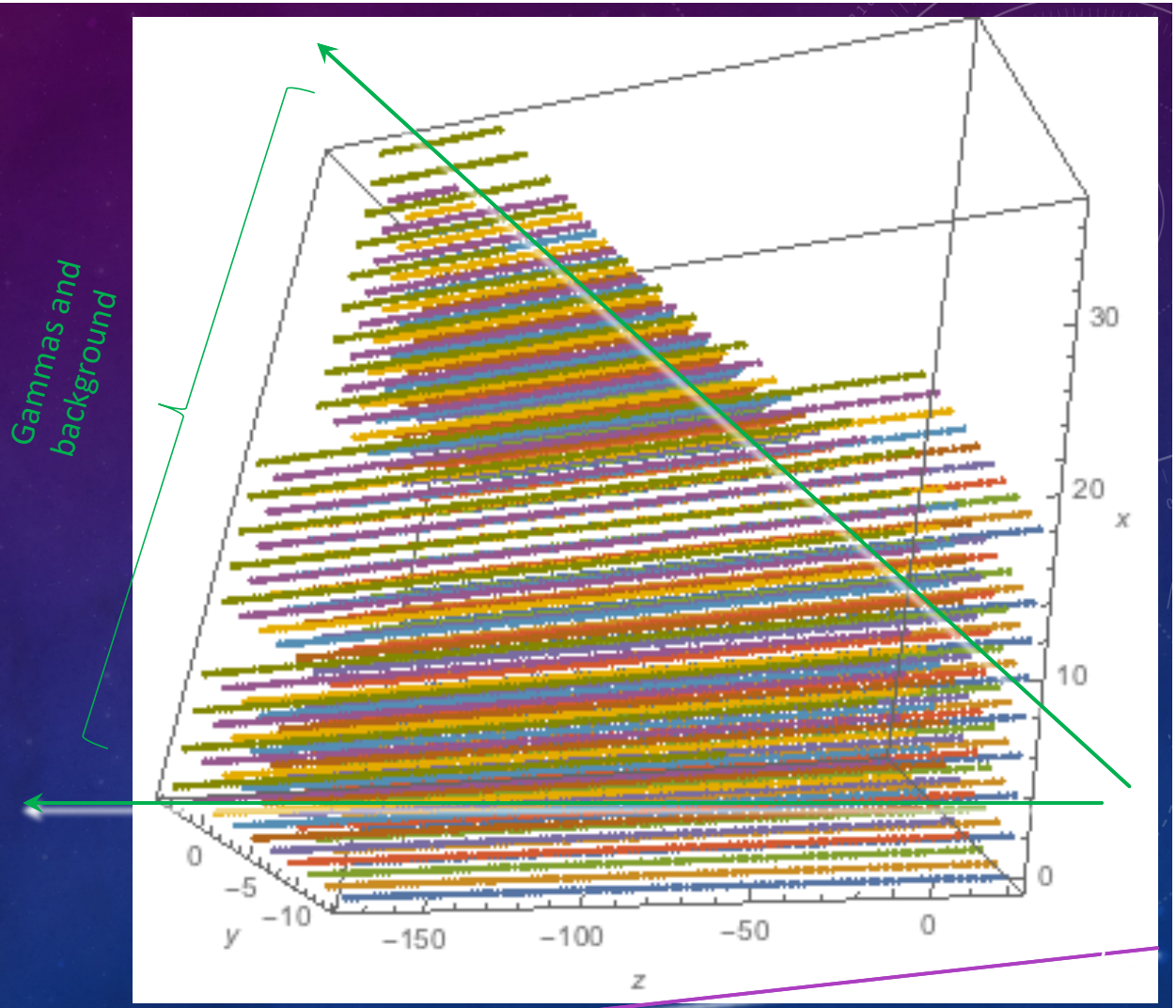
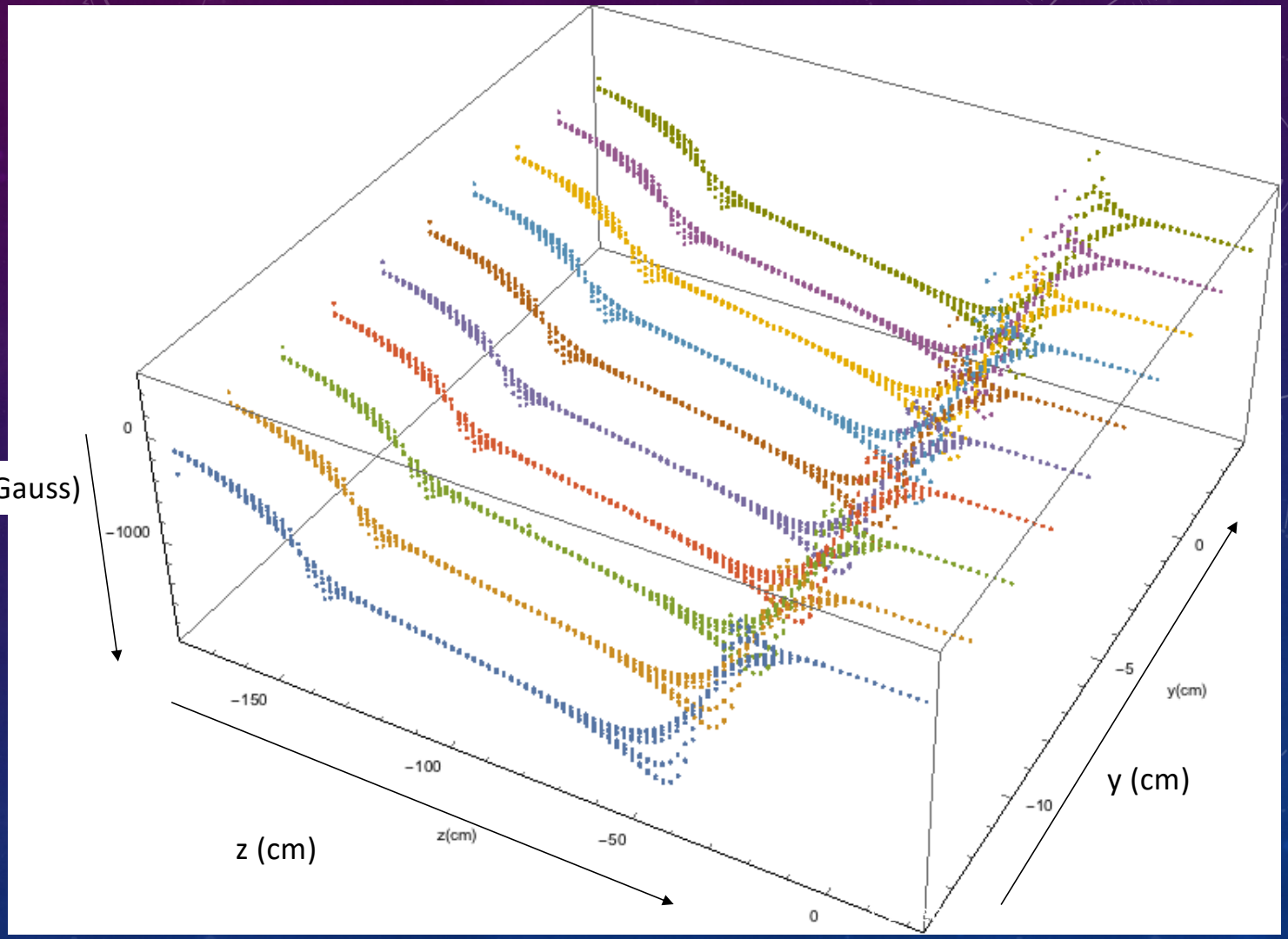
MAGNET MAPPER

- 3-D Coverage
  - +z towards target
  - +y down
  - +x horizontal away from beamline
- View from below



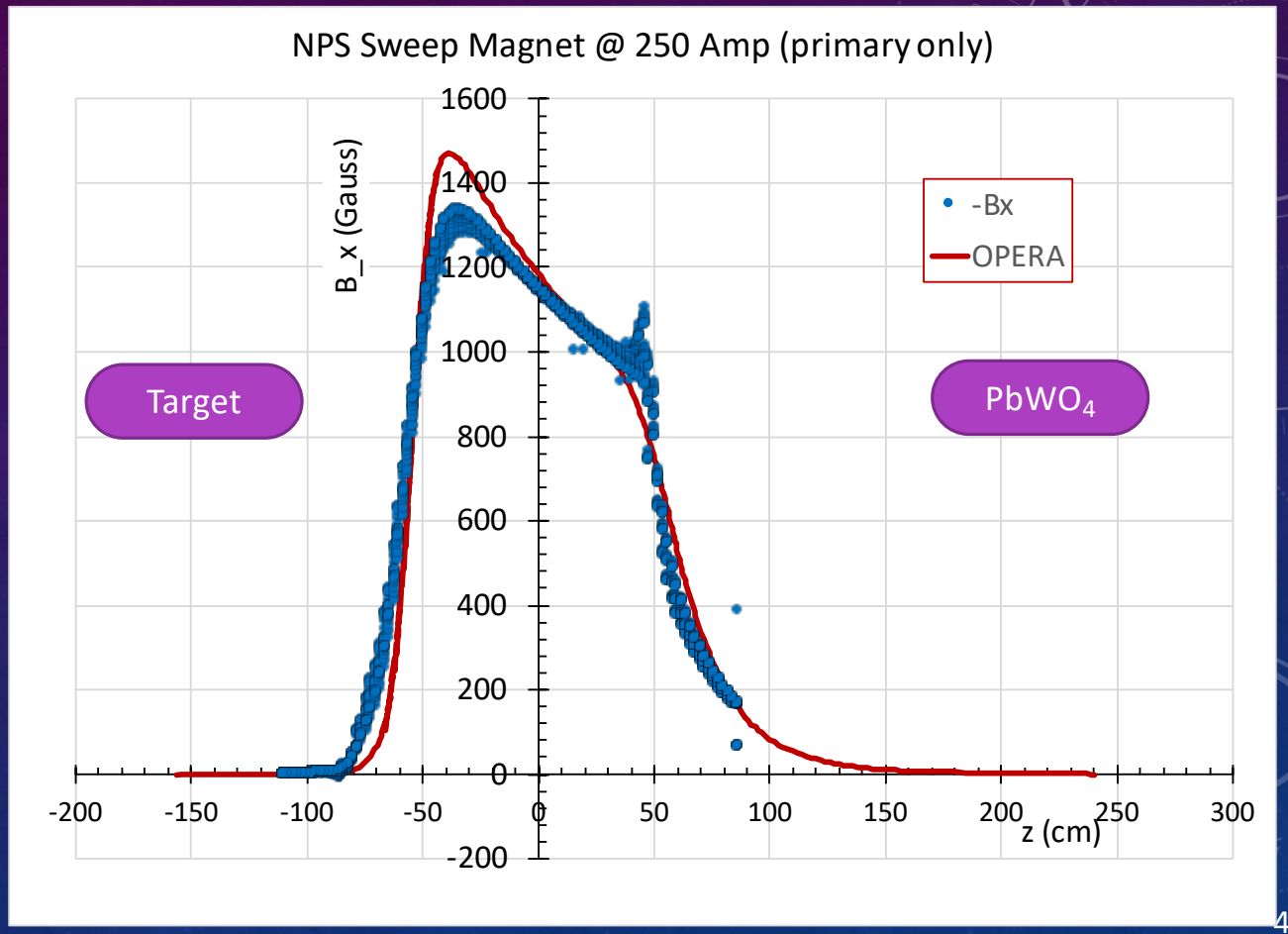
HORIZONTAL FIELD AT 250 A

- **Front trim coil off**
- Band of x-points
- Field uniform in x and y at center of z-range



B_X (Gauss) Measured vs. OPERA

- Dispersion in measured values = variation with x-coord in gap
- OPERA = full calculation w/ clamp coil



TO DO LIST

- Analyze Measured values in Beam Line gap
- Model/Interpolate 3-D data, Calculate OPERA values at measured points
- **Map Magnet at full power**
  - Power Supply, Cooling only available in Hall
  - Mapper is adjusted for height of magnet on stand on SHMS platform(?)
    - Magnet currently on wood blocks in Test Lab
  - Mapper needs, ~ 1 m of lateral space (with floor/platform)
  - Power-up and map on floor of Hall (preferred) or on SHMS platform?

SUGGESTIONS?