

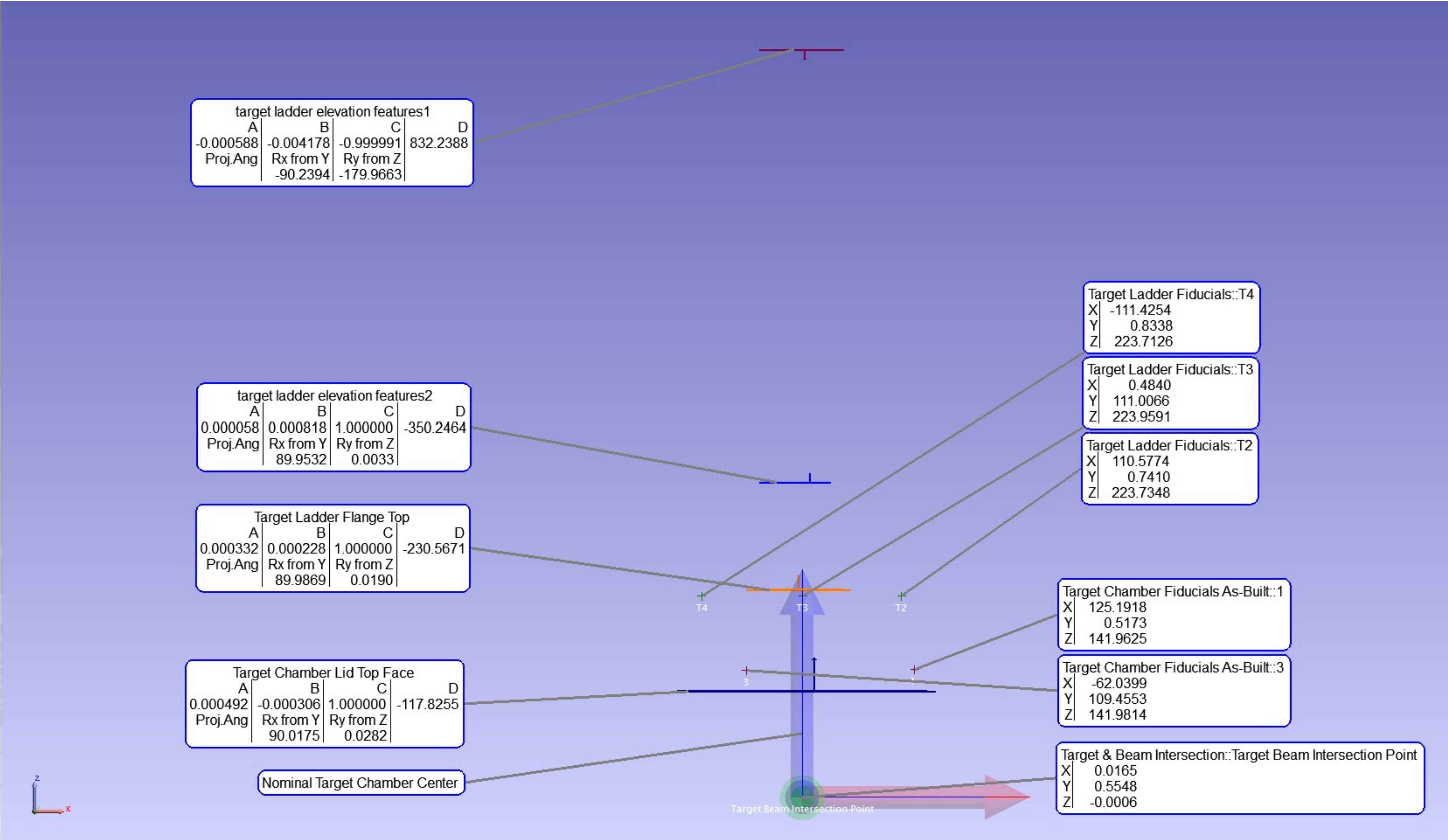
Survey and Alignment

Thanks to Tony Hessels and Laura Miller

- May be okay**
- But a few questions remain**

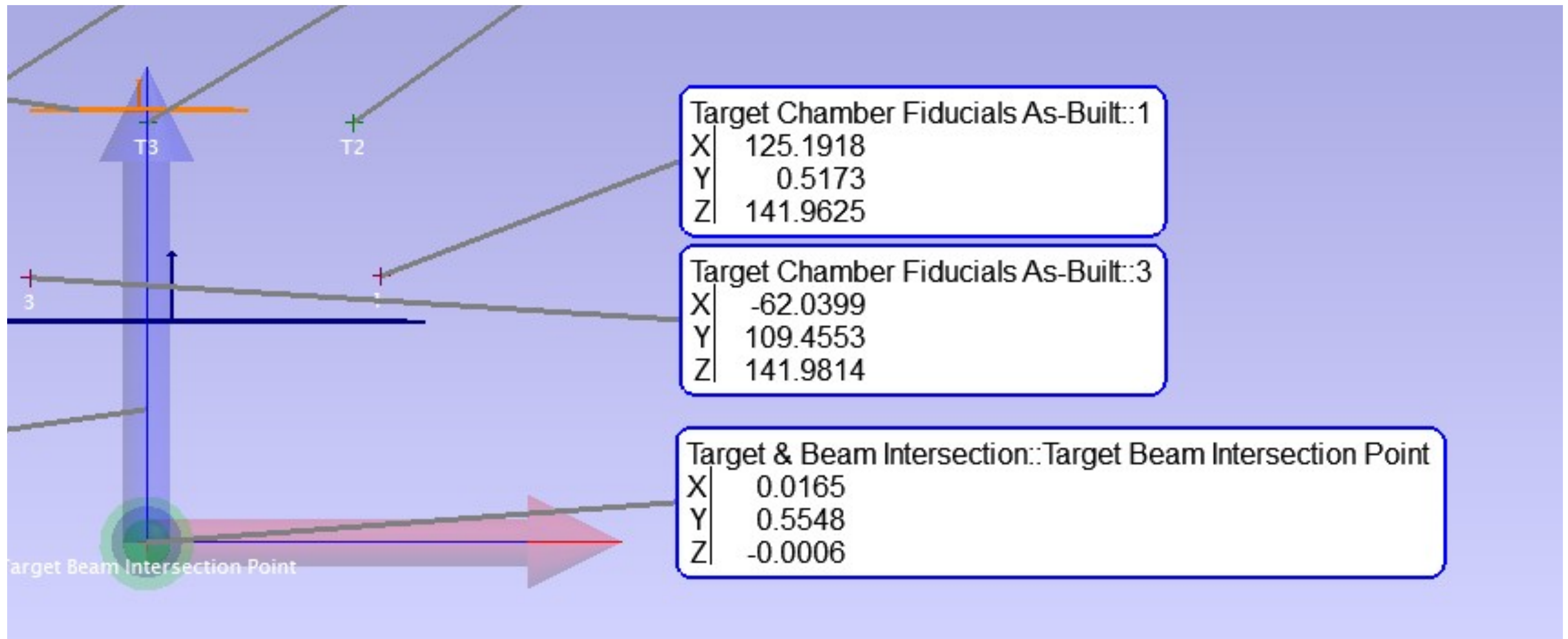
Scattering Chamber and Target Ladder

- Only looking at scattering chamber for now



Scattering Chamber and Target Center

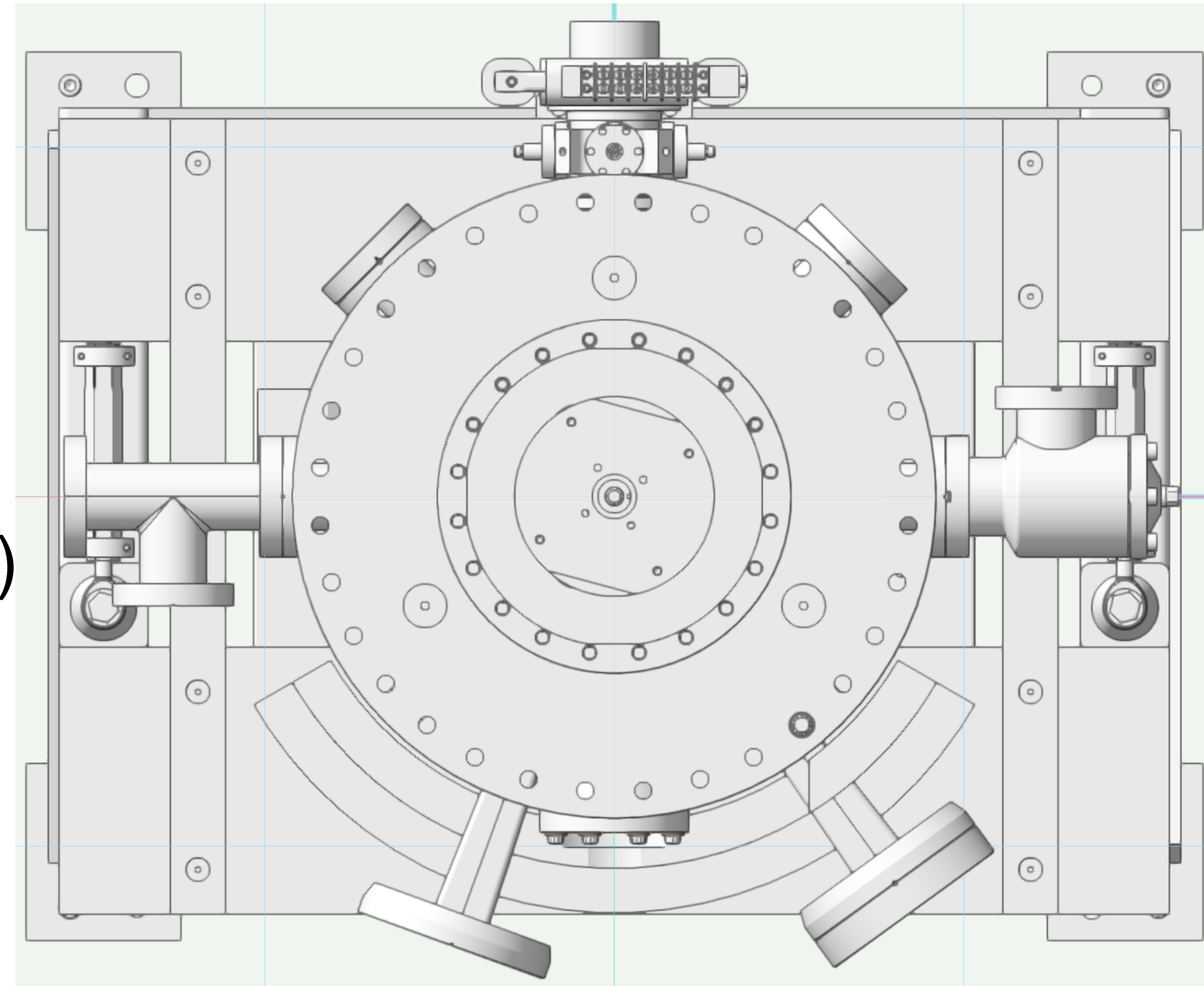
- 0.555 mm off into the eHall, rest can be ignored

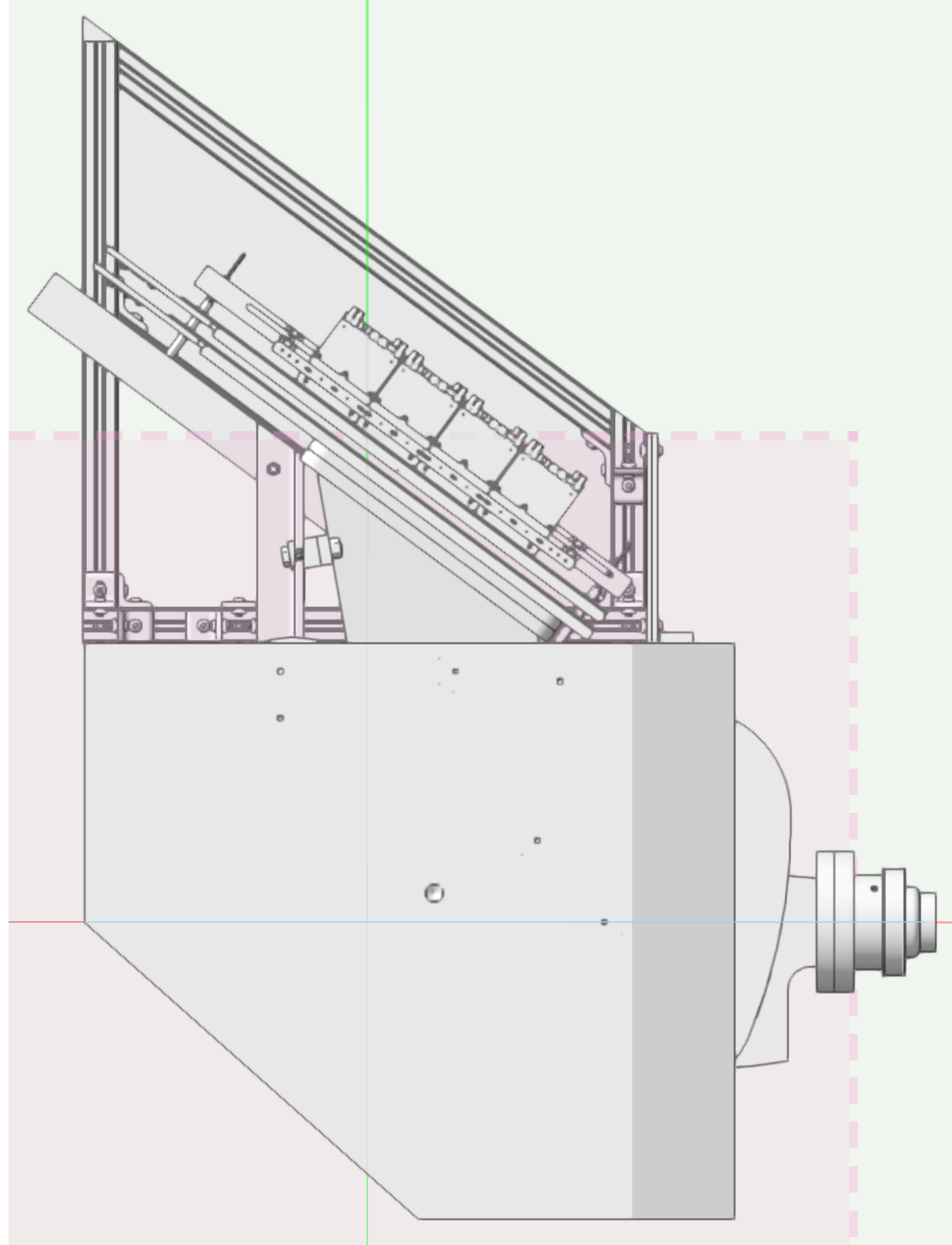


Scattering Chamber

Comparing survey and CAD model

- F1 - 125.19, 0.52, 141.96
- CAD - 125.00, 0.00, 117.00 (25.0 or 25.4)
- F2 - -62.04, 109.46, 141.98
- CAD - -62.00, 108.00, 117.00 (25.0, or 25.4)
- Target - 0.02, 0.55, 0.00
- CAD - 0.00, 0.00, 0.00

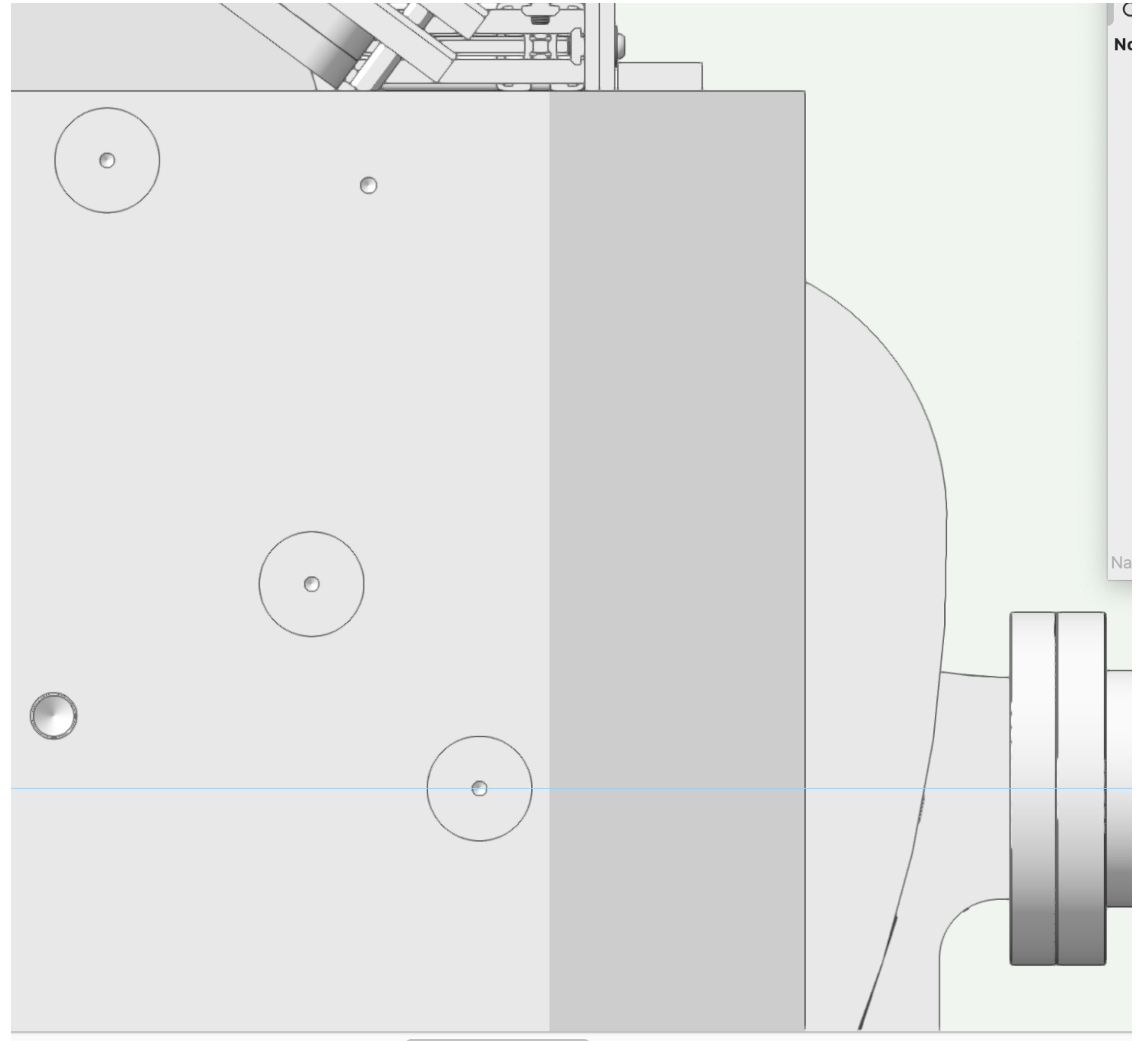




North Dipole Yoke

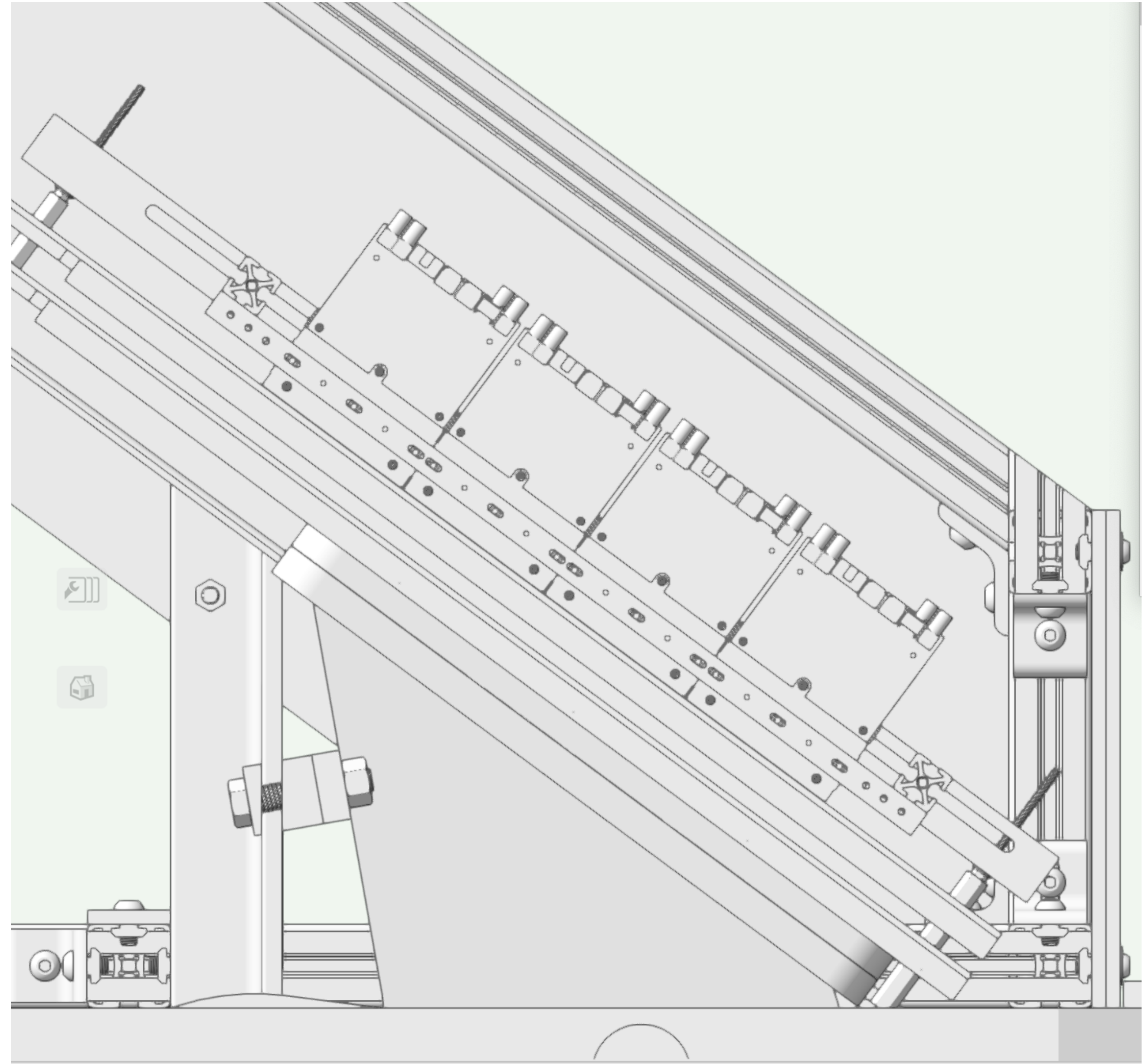
Comparing survey and CAD model

- F1 - 799.96, 204.92, 270.03
- CAD - 800.00, 179.00, 270.00
- F2 - 712.06, 204.88, 87.92
- CAD - 712.00, 179.00, 88.00
- F3 - 639.93, 204.89, 0.08
- CAD - 640.00, 179.00, 0.00
- E - 410.17, 0.41, 0.19
- CAD - 412.00, 0.00, 0.00



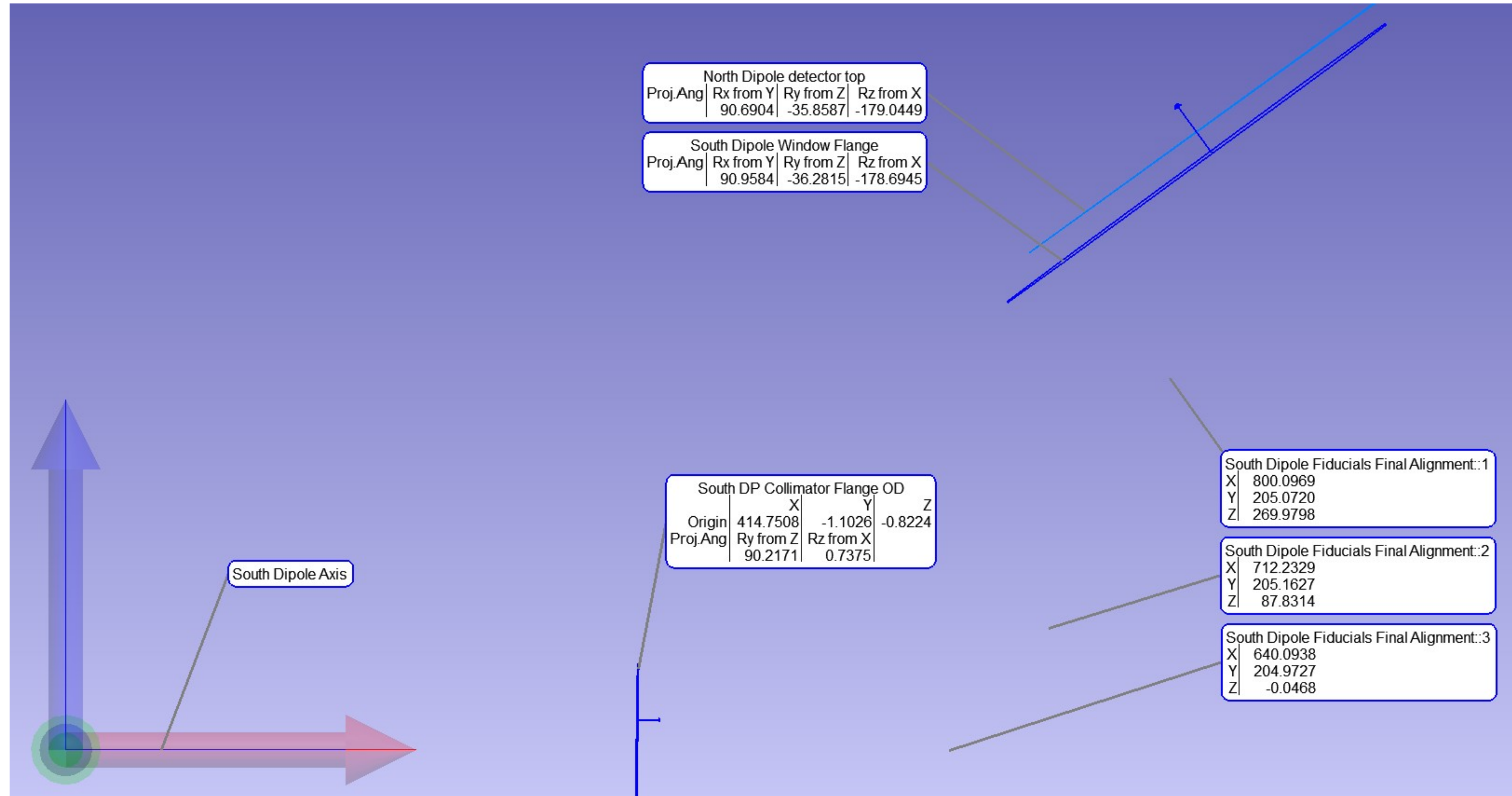
North Dipole Exit Flange and GEM

- Tony measured angle of planes
- Not position, need a known point
- Exit Flange 36.42° should be 36.43°
- GEM 36.63° should be 36.43°
- Absolute position ?
- Relative separation ?
- Focal plane 15 mm above exit flange
- Focal plane 6 mm inside GEM
- Gap should be 9 mm



South Dipole - i.e. 36° or Electron Arm

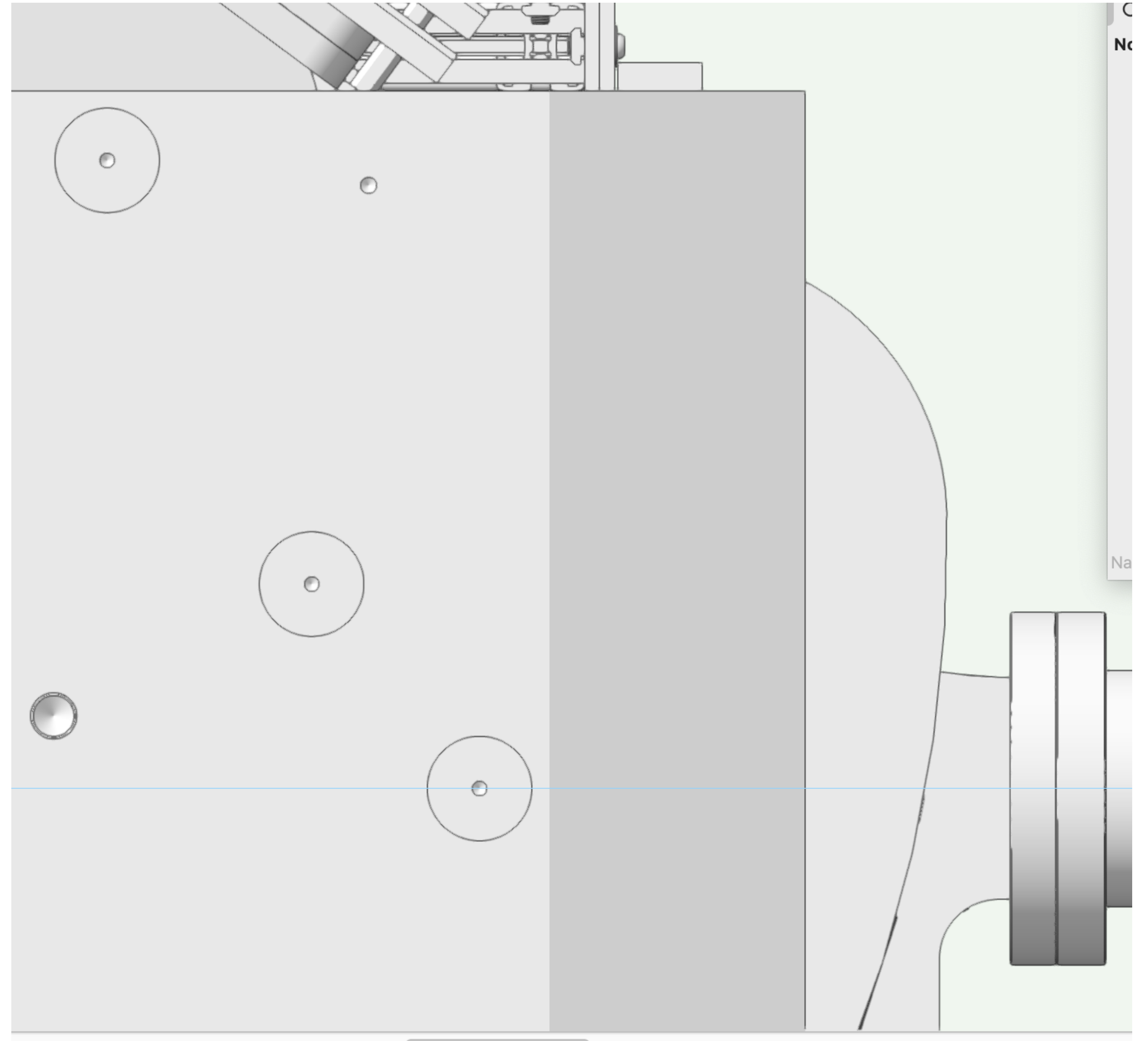
- Yoke fiducial
- Vacuum chamber entrance (?) flange, exit flange, GEM plane



South Dipole Yoke

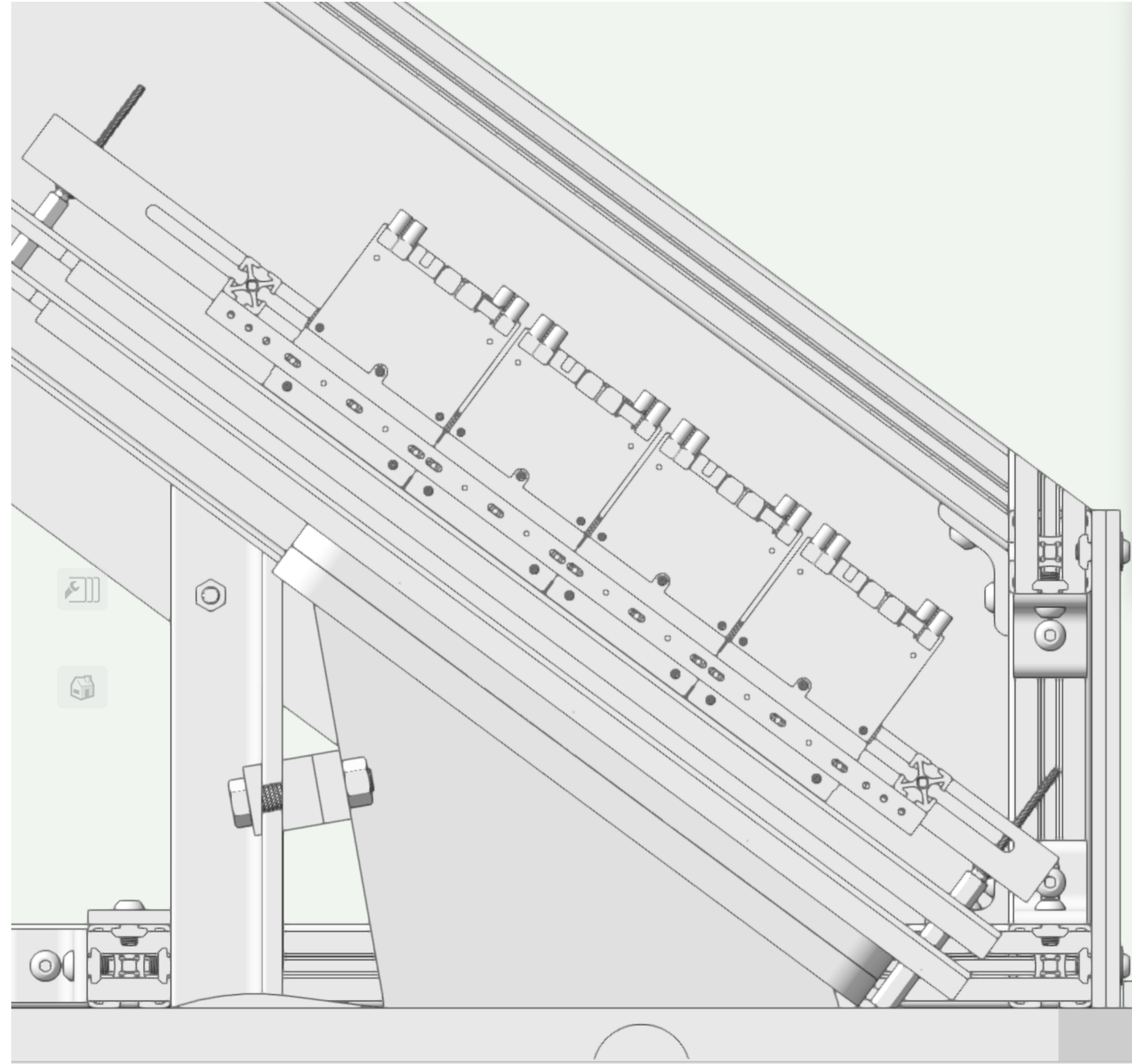
Comparing survey and CAD model

- F1 - 800.10, 205.07, 269.98
- CAD - 800.00, 179.00, 270.00
- F2 - 712.23, 205.16, 87.83
- CAD - 712.00, 179.00, 88.00
- F3 - 640.09, 204.97, -0.05
- CAD - 640.00, 179.00, 0.00
- E - 414.75, -1.10, -0.82
- CAD - 412.00, 0.00, 0.00



South Dipole Exit Flange and GEM

- Tony measured angle of planes
- Not position, need a known point
- Exit Flange 36.28° should be 36.43°
- GEM 35.86° should be 36.43°
- Absolute position ?
- Relative separation ?
- Focal plane 15 mm above exit flange
- Focal plane 6 mm inside GEM
- Gap should be 9 mm



South Dipole Vacuum Chamber Twisted

Bellows skewed !

- Which is misplaced
- Impact on vacuum chamber
- Impact on exit flange

