

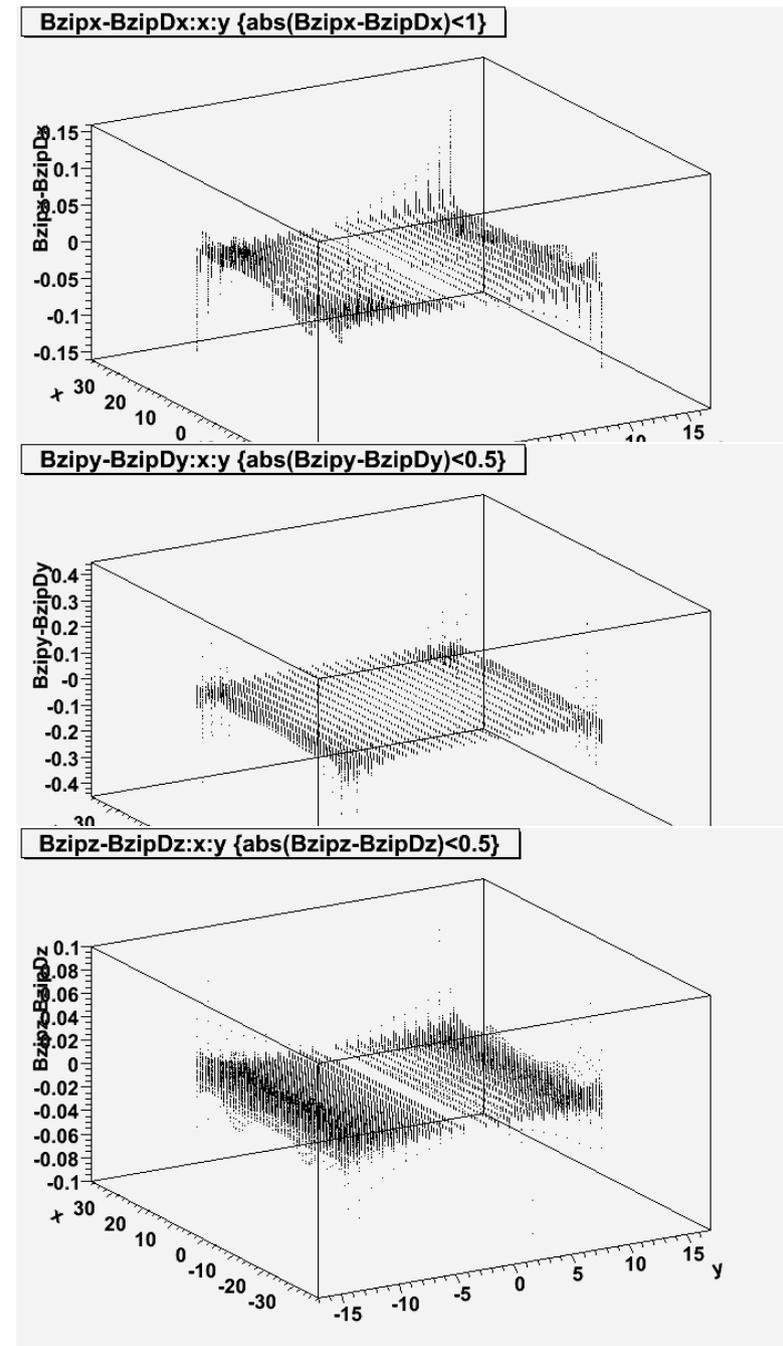
Test of Latest JGG Field Maps

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What Was Done...

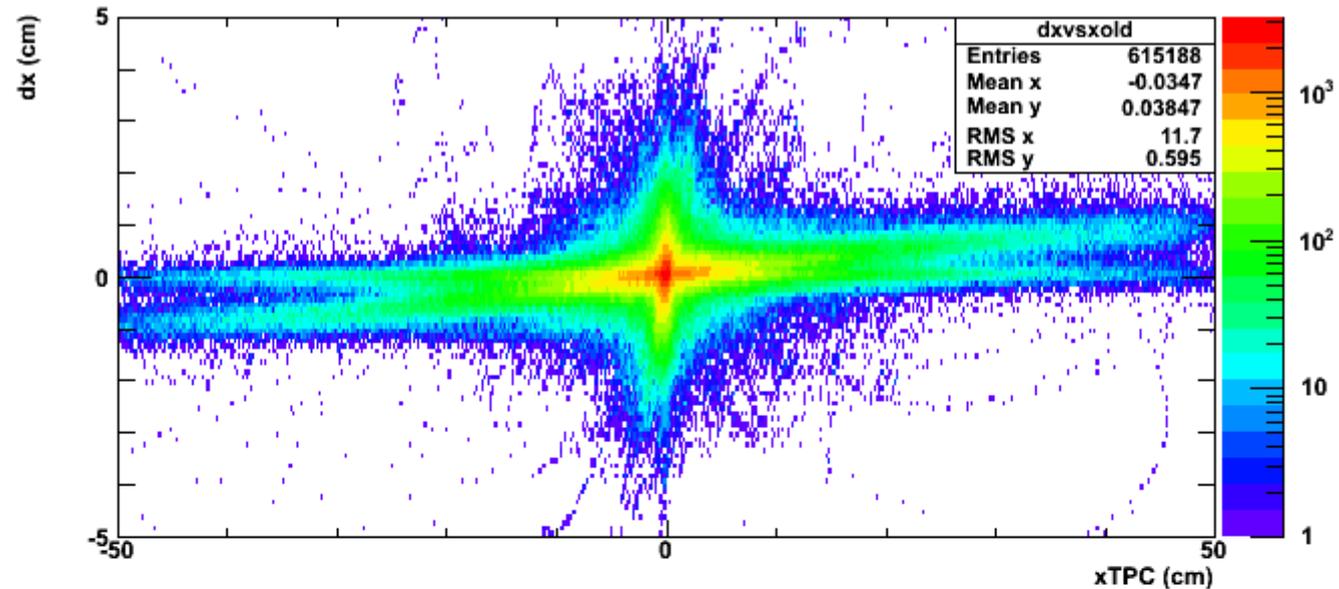
- Holger has produced new JGG field maps.
- Each JGG field map is the ziptrack map scaled to the ratio of the computed maps for different periods:
 - $JGGFieldZipN = JGGField_{zip} * \frac{JGGField_{compN}}{JGGField_{compA}}$
 - Note that $JGGFieldZipA = JGGField_{compA}$



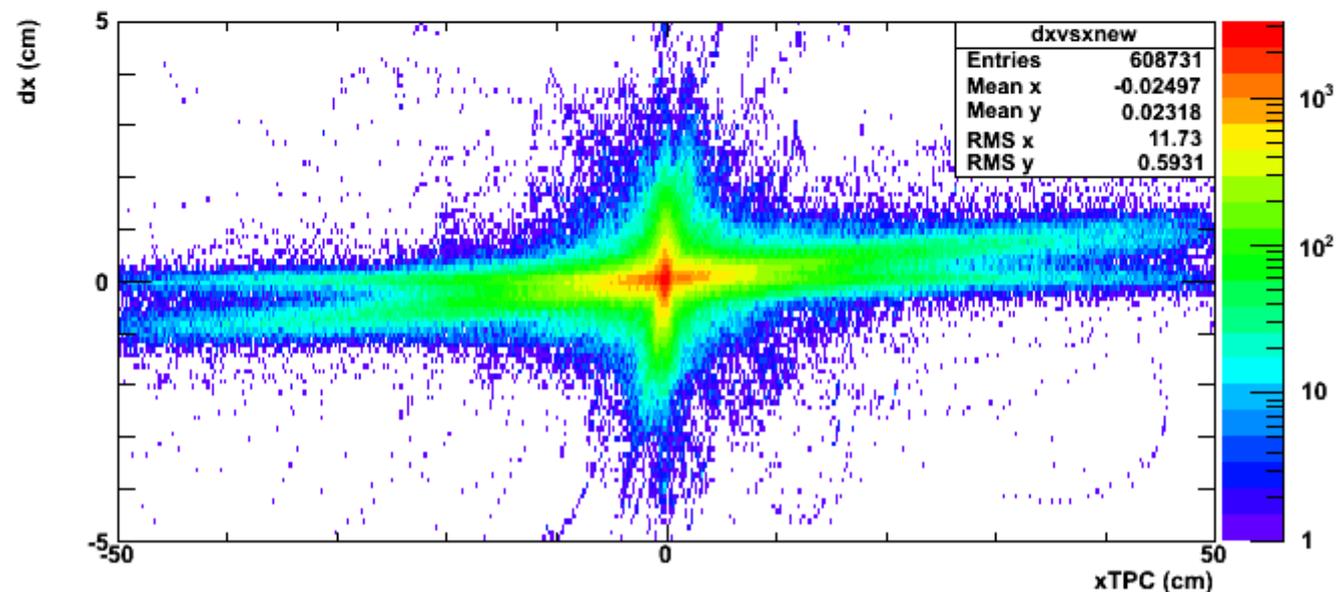
Comparison of JGGFieldZipA vs. JGGFieldZipB

- I reconstructed 2000 events in run 15860 (period B) with the old field map and the latest scaled map.
- Vertex is constrained to come from target.
- There are small differences in dx vs. x , but the correlation remains.

xTPC-xTPCFit vs. xTPC, Orig. Field



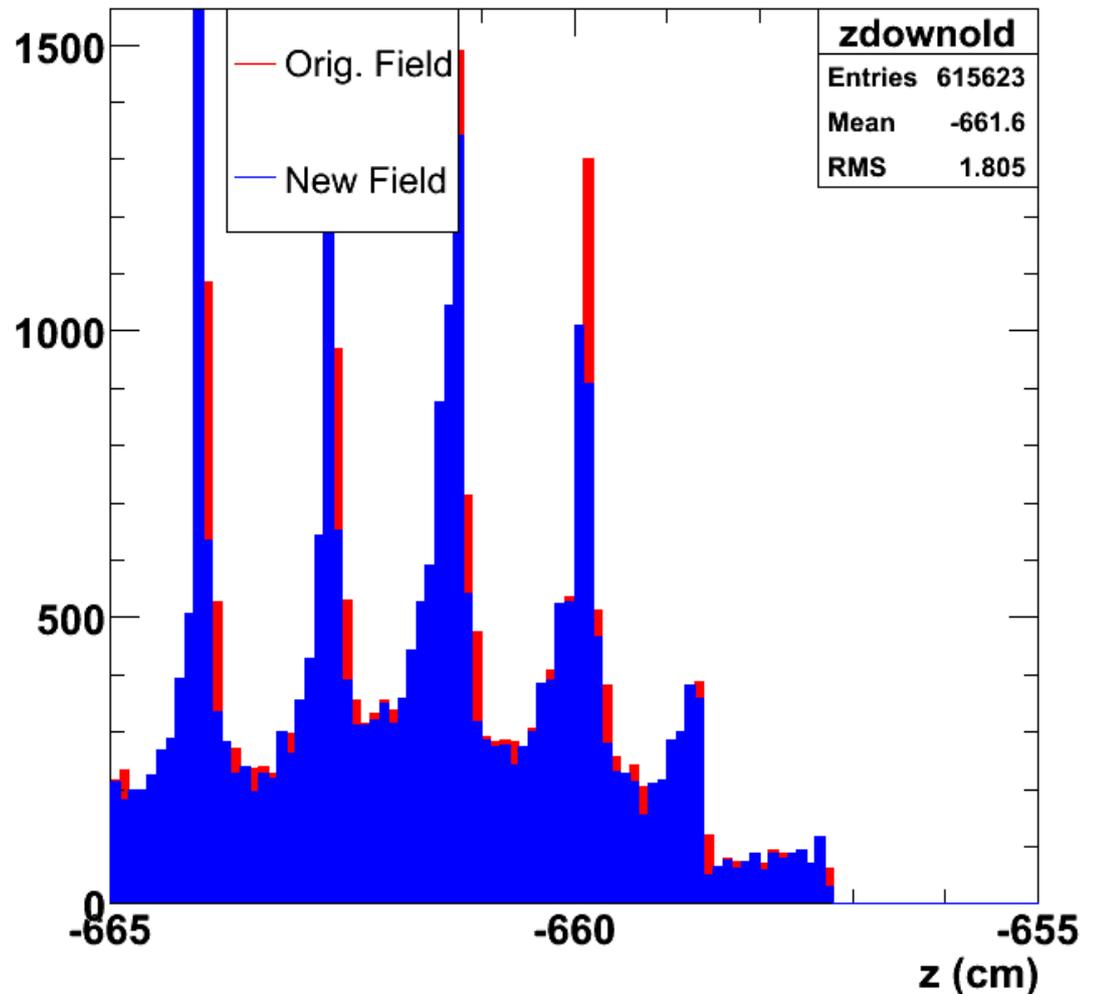
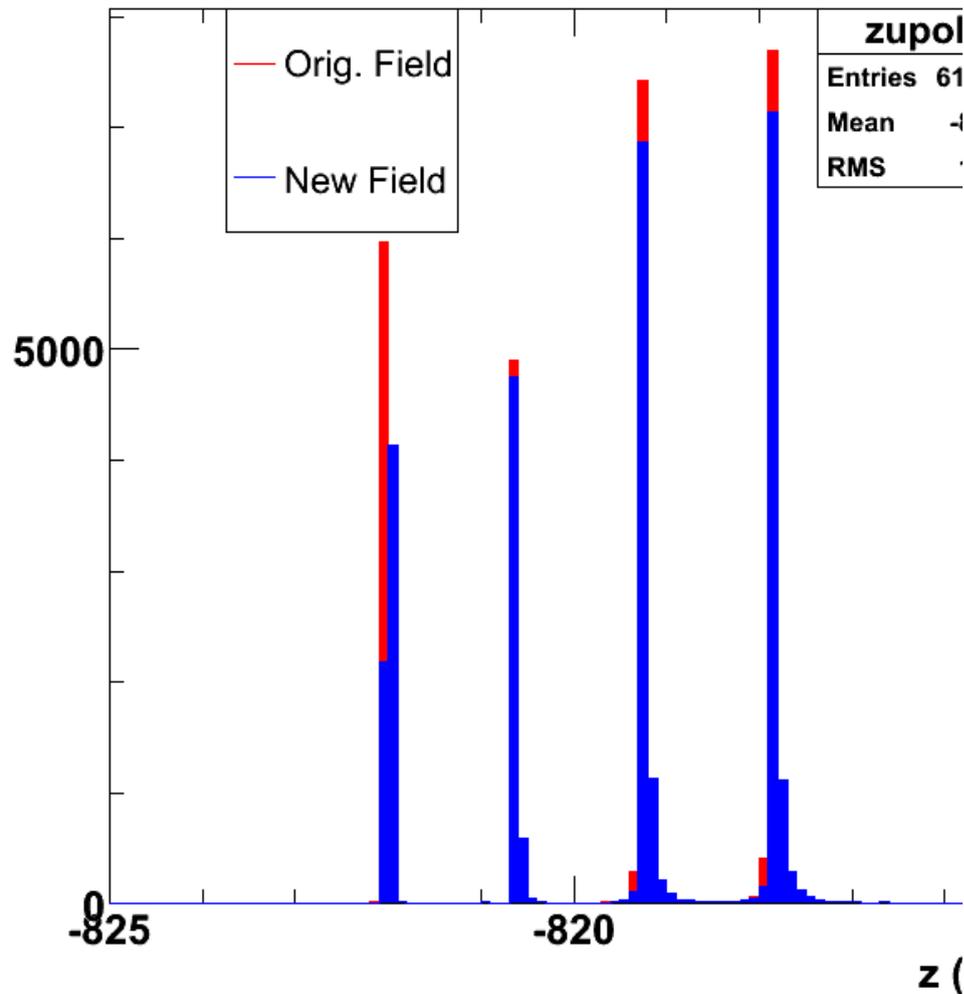
xTPC-xTPCFit vs. xTPC, New Field



Comparison of z-Distributions of TPC Hits

TPC Hit z-position, Orig. Field

TPC Hit z-position, Orig. Field



No obvious improvement... hits are still formed outside of TPC gas volume.

Conclusions

- Although the new fields differ by $\sim -0.1-0.2$ T in the wings, we see no improvement in the dx vs. x correlation when we constrain the vertex to come from the target.
- No improvement in the z-distributions of TPC hits.
- I see no compelling reason to move to these new fields... at least not until we resolve the current issues with hit and track reconstruction.