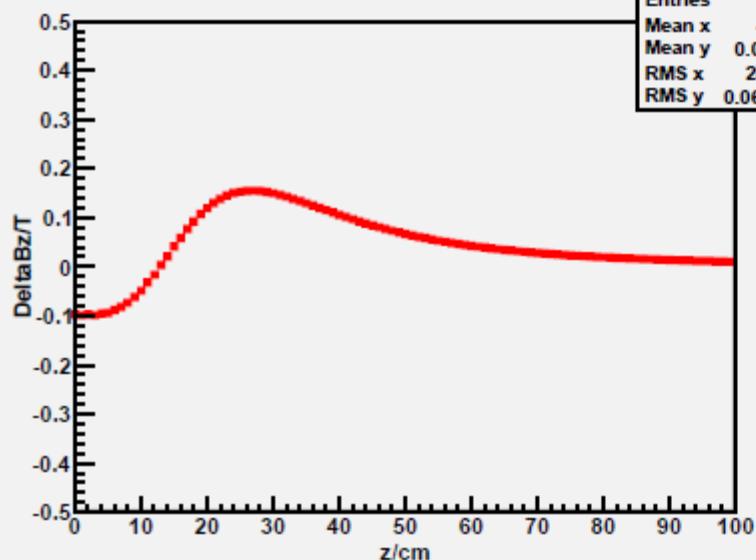


- New and old Tosca model comparison

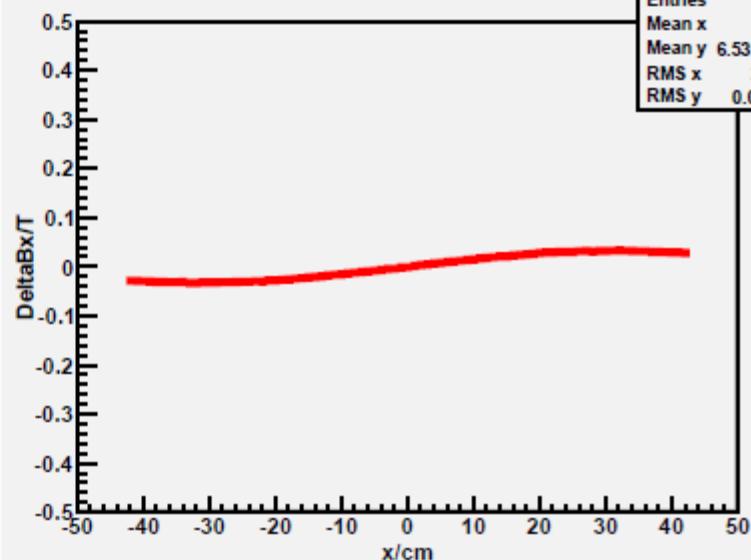
DeltaBz=BzNEW-BzOLD, x=0, y=0, z=0~100



DeltaBz:z

Entries	101
Mean x	49.5
Mean y	0.0448
RMS x	28.87
RMS y	0.06558

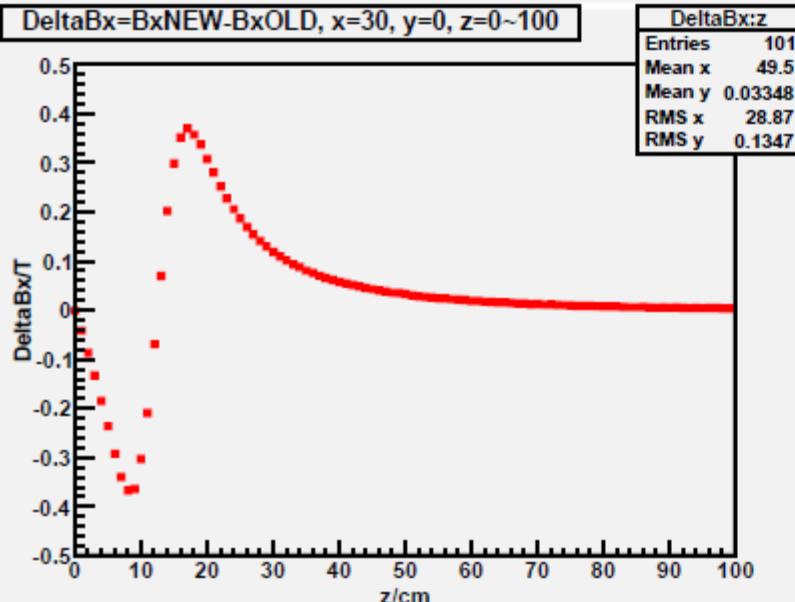
DeltaBx=BxNEW-BxOLD, x=-50~50, y=0, z=50



DeltaBx:x

Entries	101
Mean x	0
Mean y	6.531e-19
RMS x	24.54
RMS y	0.02509

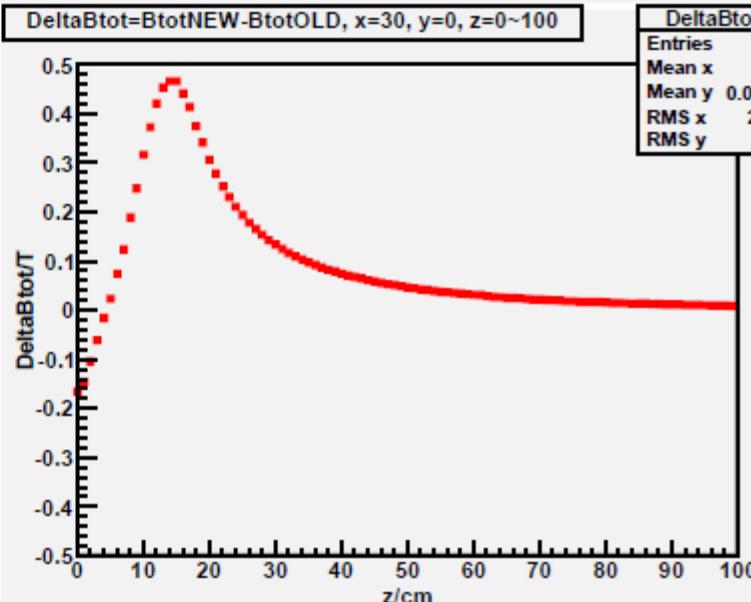
DeltaBx=BxNEW-BxOLD, x=30, y=0, z=0~100



DeltaBx:z

Entries	101
Mean x	49.5
Mean y	0.03348
RMS x	28.87
RMS y	0.1347

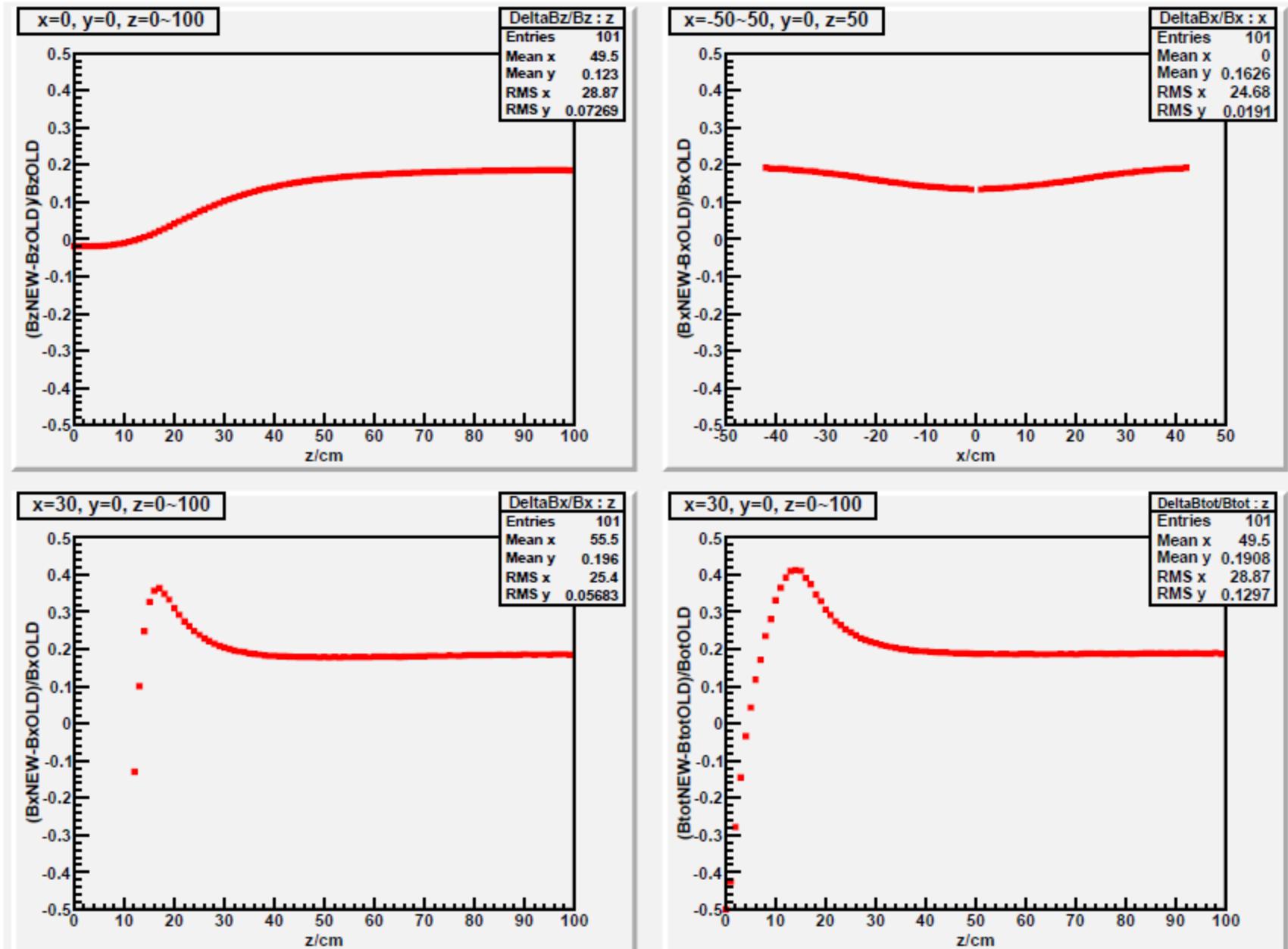
DeltaBtot=BtotNEW-BtotOLD, x=30, y=0, z=0~100



DeltaBtot:z

Entries	101
Mean x	49.5
Mean y	0.09059
RMS x	28.87
RMS y	0.13

- New and old Tosca model comparison



• Table 1

Data NO.	offset_x	offset_y	offset_z	probe angle x	probe angle y	probe angle z	table angle x	table angle y	table angle z	currentratio
1	-0.54375	-0.10246	0.363976	-0.00219271	-0.0153615	-0.00312633	-0.00958977	0.0499758	0.00084179	0.983
2	-0.79076	-0.12091	0.374188	-0.00226924	-0.0186692	-0.00320542	-0.00886604	0.0465549	0.00068217	0.983
3	-0.67754	-0.12909	0.370511	-0.00294019	-0.0133797	-0.00323076	-0.00849805	0.0478739	0.00074759	0.983

- a. Here just use one point (probe position) from survey group
table coordinate (45.5, 0, 22) → survey coordinate (2.797 ,0.493 , 72.845)
- b. Data No. X rang (x low, x high) × Z range(z low , z high)
NO.1 X(34, 56)× Z(0, 22): 144 points ;
NO.2 X(18, 72)× Z(0, 22): 336 points ;
NO.3 X(18, 24× Z(0, 22) + X(66, 72)× Z(0, 22): 96 points ;
- c. X boundary: -0.8<X<0.8cm; Y boundary: -1<Y<1cm; Z boundary : -1<Z<1cm;
ALL angle: $-0.05 < \theta < 0.05$ rad, except $-0.03 < \theta_z < 0.03$ rad;
1 deg = 0.017 rad;
- d. Use the N0.2 fit result, obtain table 2:

Satisfy $(B_i - \bar{B}_i)/\bar{B}_i$	<1%	2%	3%
B_z	98.21%	1	1
B_r	72.32%	87.20%	90.48 %
B_{tot}	1	1	1