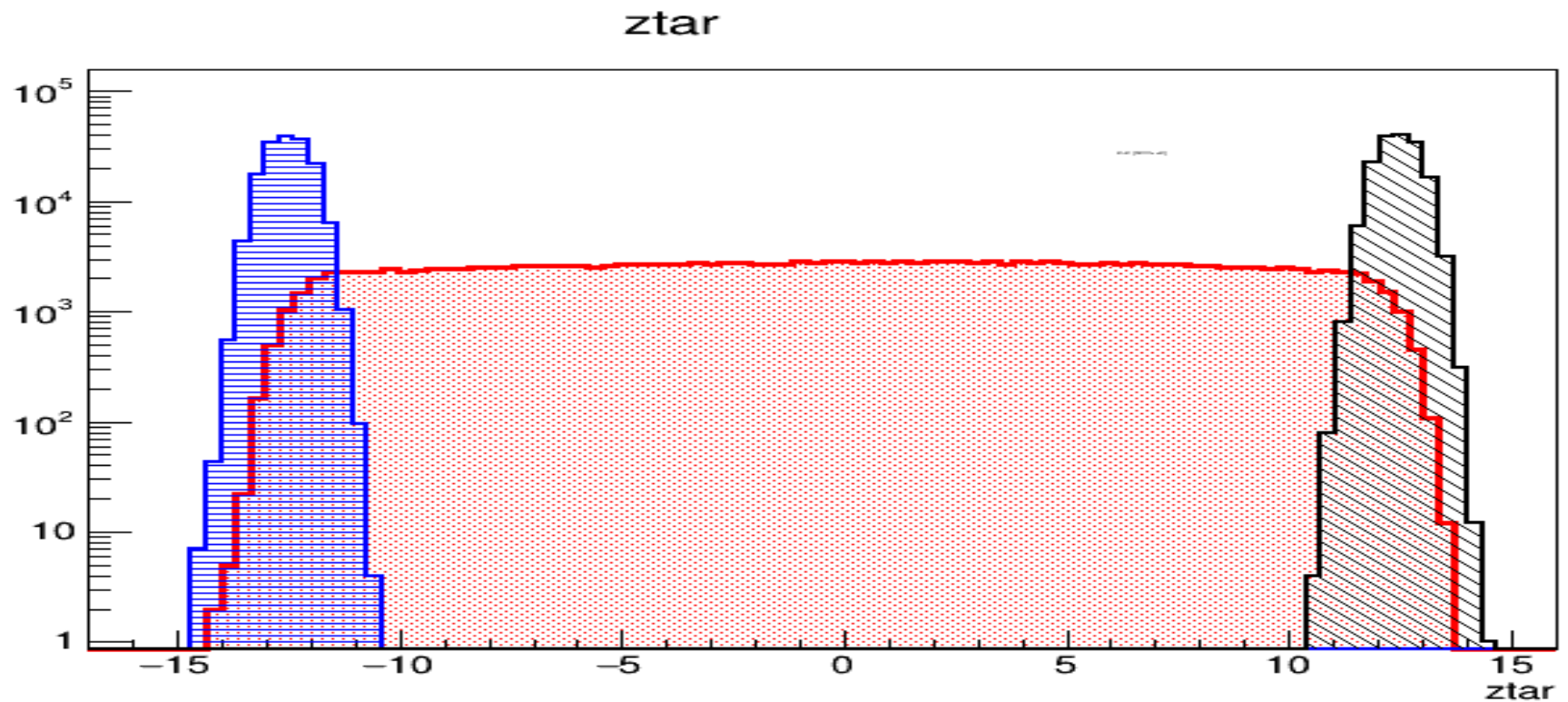


SIMC WIP!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

- Event generator
- Cross section table
- Weight
- Compare

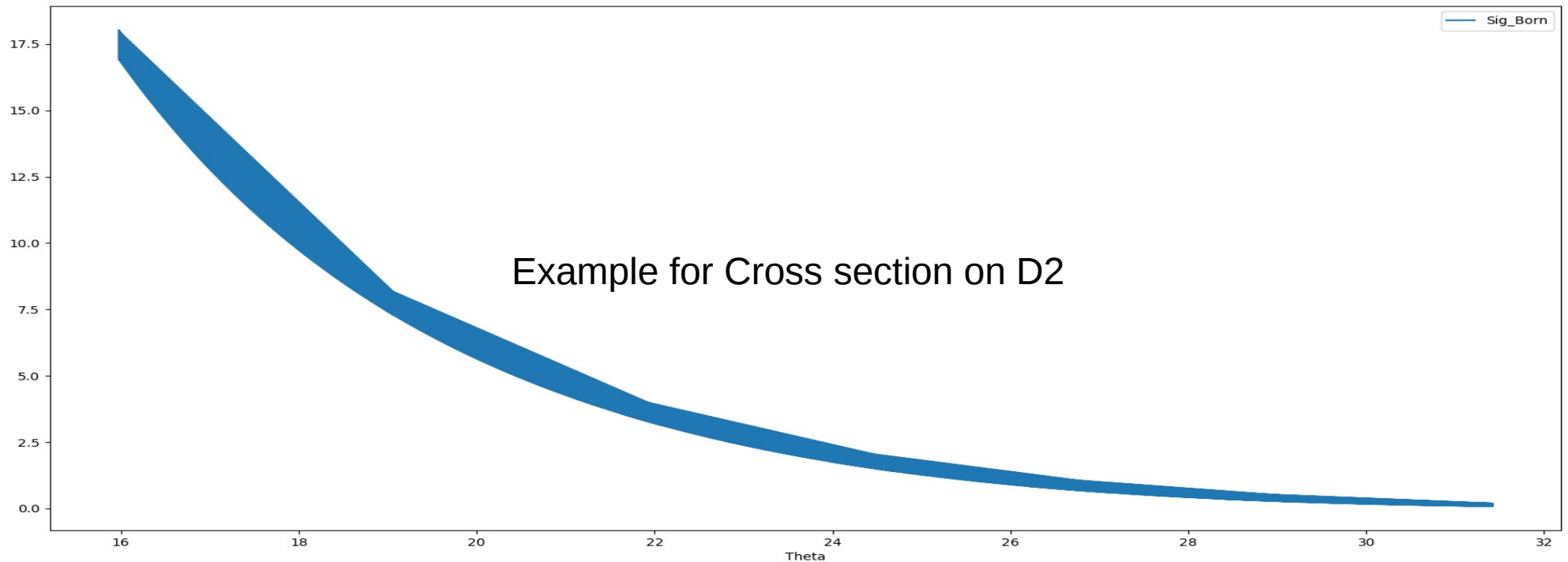
Event Generator

- For A gas target generate events from inside the cell
- For the end caps



Cross section table

- Dave Gaskell provided edited version of his externals table producer
 - Bodek fit to old SLAC data with a simple parametrization for the EMC effect. For the QE contribution, Peter Bosted's super-scaling fit
 - Radiative → Full 2-D Mo and Tsai integral

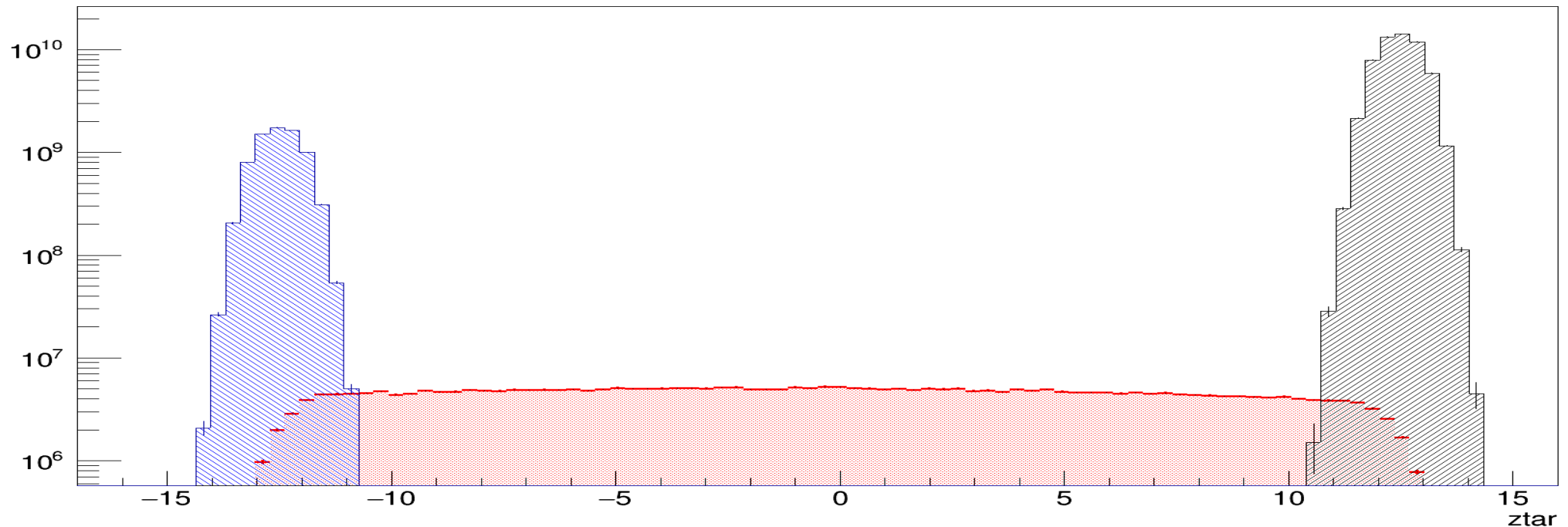


Weighting

- Interpolate between 4 points to determine the cross section for the event

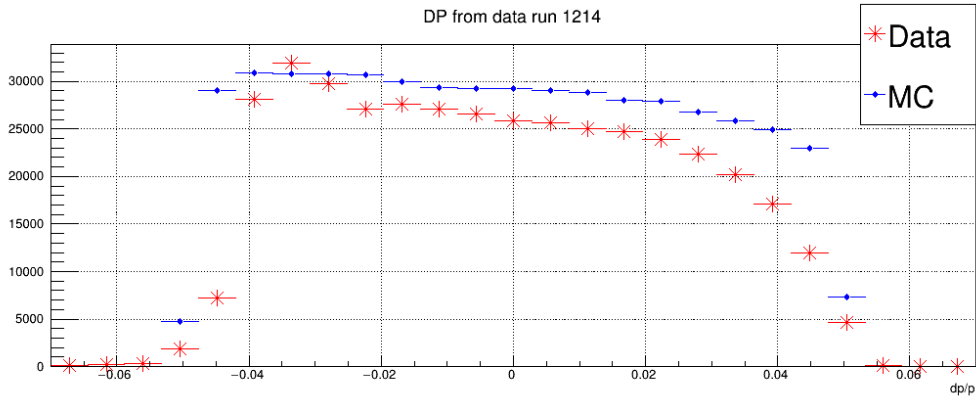
10.600	2.945	20.830	7.2914	0.92223
10.600	2.945	20.930	7.1027	0.92386
10.600	2.965	20.830	7.2199	0.92480
10.600	2.965	20.930	7.0319	0.92643

zstar weighted



Comparison

DP from data run 1214



Cuts applied to Data

$E/p > 0.7$

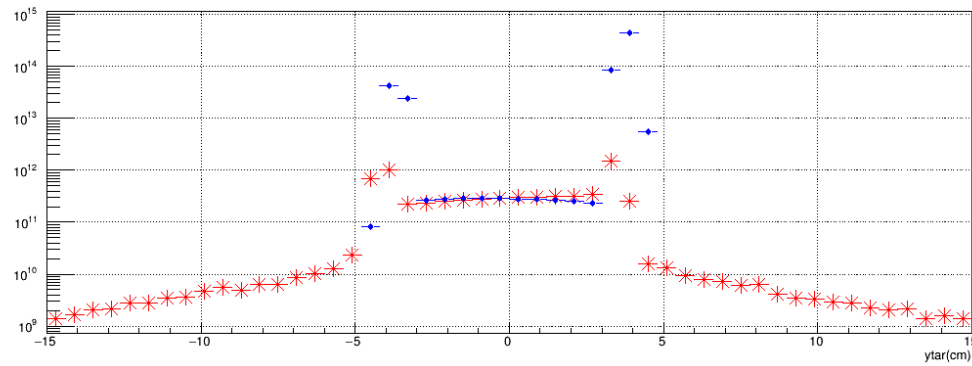
$Cer > 1500$

$Beta > 0.5$

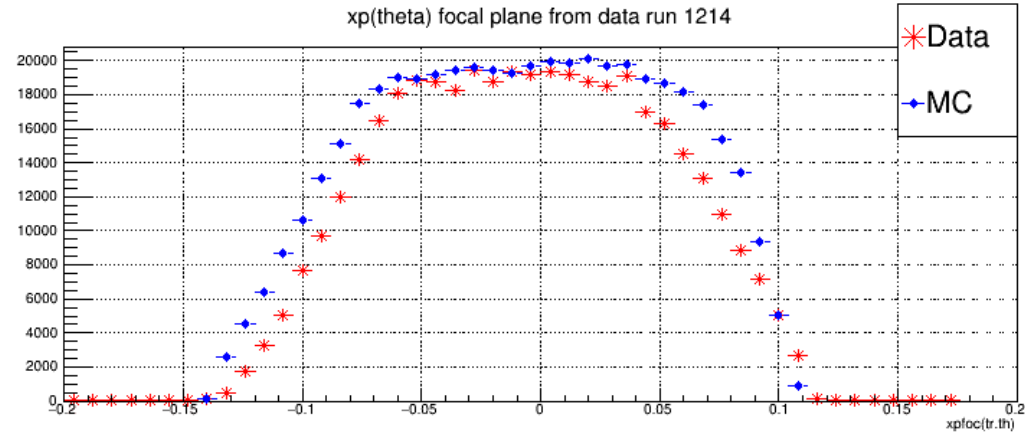
For non y_{tar} plots

$abs(Vz) < 9cm$

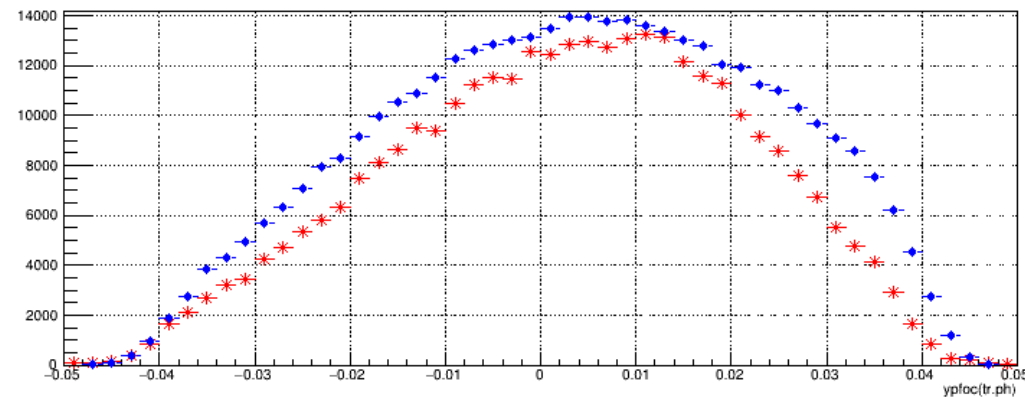
Y target from data run 1214



xp(theta) focal plane from data run 1214



yp(phi) focal plane from data run 1214



Sql MARATHONanalysis

```
MySQL [triton-work]> select * from MARATHONanalysis WHERE run_number <=1225;
```

run_number	current	charge	trigger_id	livetime	trigger_counts	trigger_events	elist
1206	10.12	5405.44	DL.bit2	0.998728	786	785	/v/lustre2/expphy/volatile/halla/triton/MARATHON_elist/elist/bcm1206_0_5.root
1207	10.12	3961.46	DL.bit2	0.989754	19715	19513	/v/lustre2/expphy/volatile/halla/triton/MARATHON_elist/elist/bcm1207_0_5.root
1208	10.12	6288.35	DL.bit2	0.949425	158082	150087	/v/lustre2/expphy/volatile/halla/triton/MARATHON_elist/elist/bcm1208_0_5.root
1209	20.12	26109.9	DL.bit2	0.972974	185341	180332	/v/lustre2/expphy/volatile/halla/triton/MARATHON_elist/elist/bcm1209_0_5.root
1210	20.12	33273	DL.bit2	0.963976	308657	297538	/v/lustre2/expphy/volatile/halla/triton/MARATHON_elist/elist/bcm1210_0_5.root
1211	20.38	26967	DL.bit2	0.963791	249219	240195	/v/lustre2/expphy/volatile/halla/triton/MARATHON_elist/elist/bcm1211_0_5.root
1212	20.38	20395.8	DL.bit2	0.964432	189468	182729	/v/lustre2/expphy/volatile/halla/triton/MARATHON_elist/elist/bcm1212_0_5.root
1213	20.38	23263.9	DL.bit2	0.951973	291547	277545	/v/lustre2/expphy/volatile/halla/triton/MARATHON_elist/elist/bcm1213_0_5.root
1214	20.38	19808.3	DL.bit2	0.946825	257414	243726	/v/lustre2/expphy/volatile/halla/triton/MARATHON_elist/elist/bcm1214_0_5.root
1215	20.38	30151.7	DL.bit2	0.946152	402376	380709	/v/lustre2/expphy/volatile/halla/triton/MARATHON_elist/elist/bcm1215_0_5.root
1216	20.38	20074.1	DL.bit2	0.945401	414462	391070	/v/lustre2/expphy/volatile/halla/triton/MARATHON_elist/elist/bcm1216_0_5.root