

**D1 scan and proton absorber
added to g4bl deck**

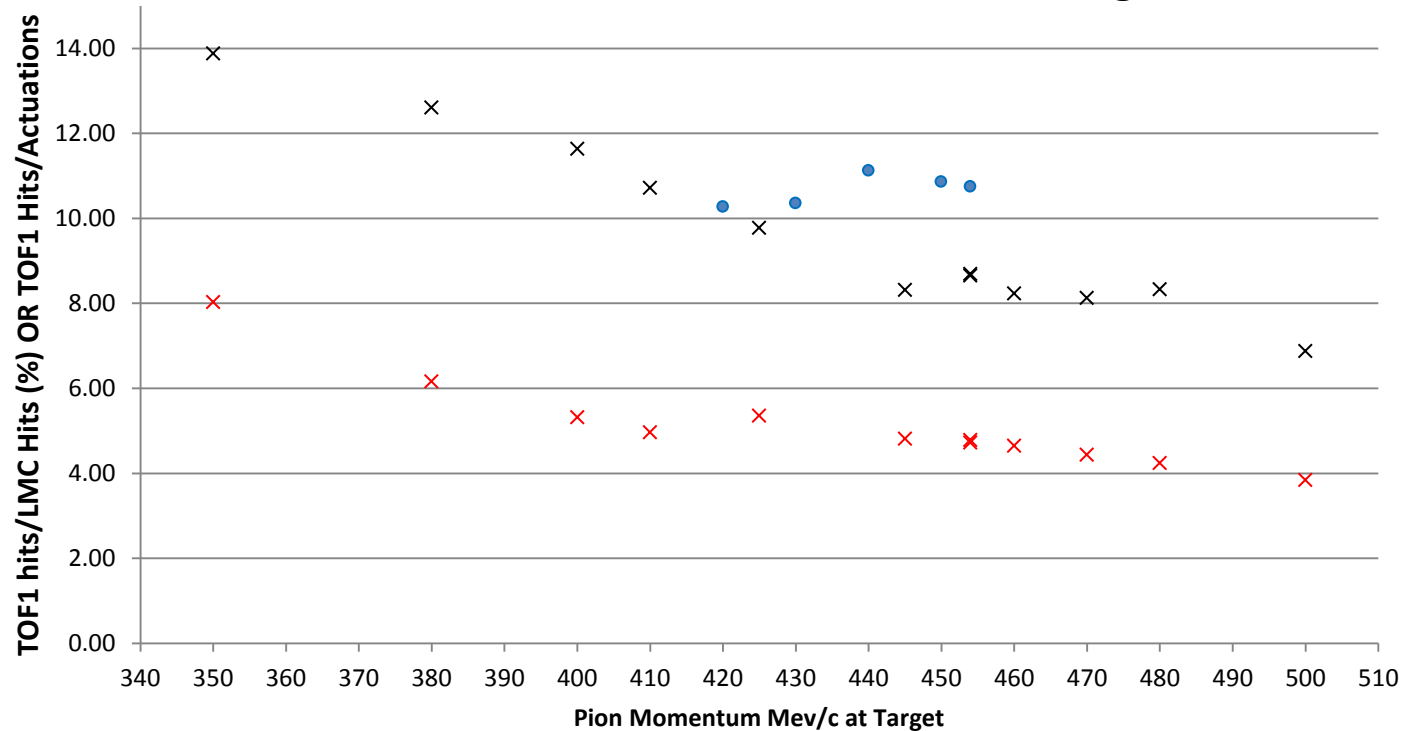
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D1 scan data

Pion Momenta	No of	Integrated	Integrated	Int TOF1/	Int Part TOF1/
(Mev/c) at Target	Actuations	TOF 1	LMC1234	Actuations	LMC1234
					x 100 i.e.(%)
454	333	3580	-	10.75	-
450	302	3280	-	10.86	-
440	311	3460	-	11.13	-
430	307	3180	-	10.36	-
420	329	3380	-	10.27	-
410	306	3280	66100	10.72	4.96
400	311	3620	68100	11.64	5.32
380	307	3870	62800	12.61	6.16
350	317	4400	54800	13.88	8.03
300	318	16300	57100	51.26	28.55
454	328	2850	59600	8.69	4.78
460	306	2520	54200	8.24	4.65
470	304	2470	55700	8.13	4.43
480	306	2550	60100	8.33	4.24
500	320	2200	57300	6.88	3.84
454	304	2630	55700	8.65	4.72
445	327	2720	56500	8.32	4.81
425	317	3100	57900	9.78	5.35

D1 scan data plot

Integrated TOF1/LMC1234 and Integrated TOF1/Actuations as a function of Pion Momentum at Target



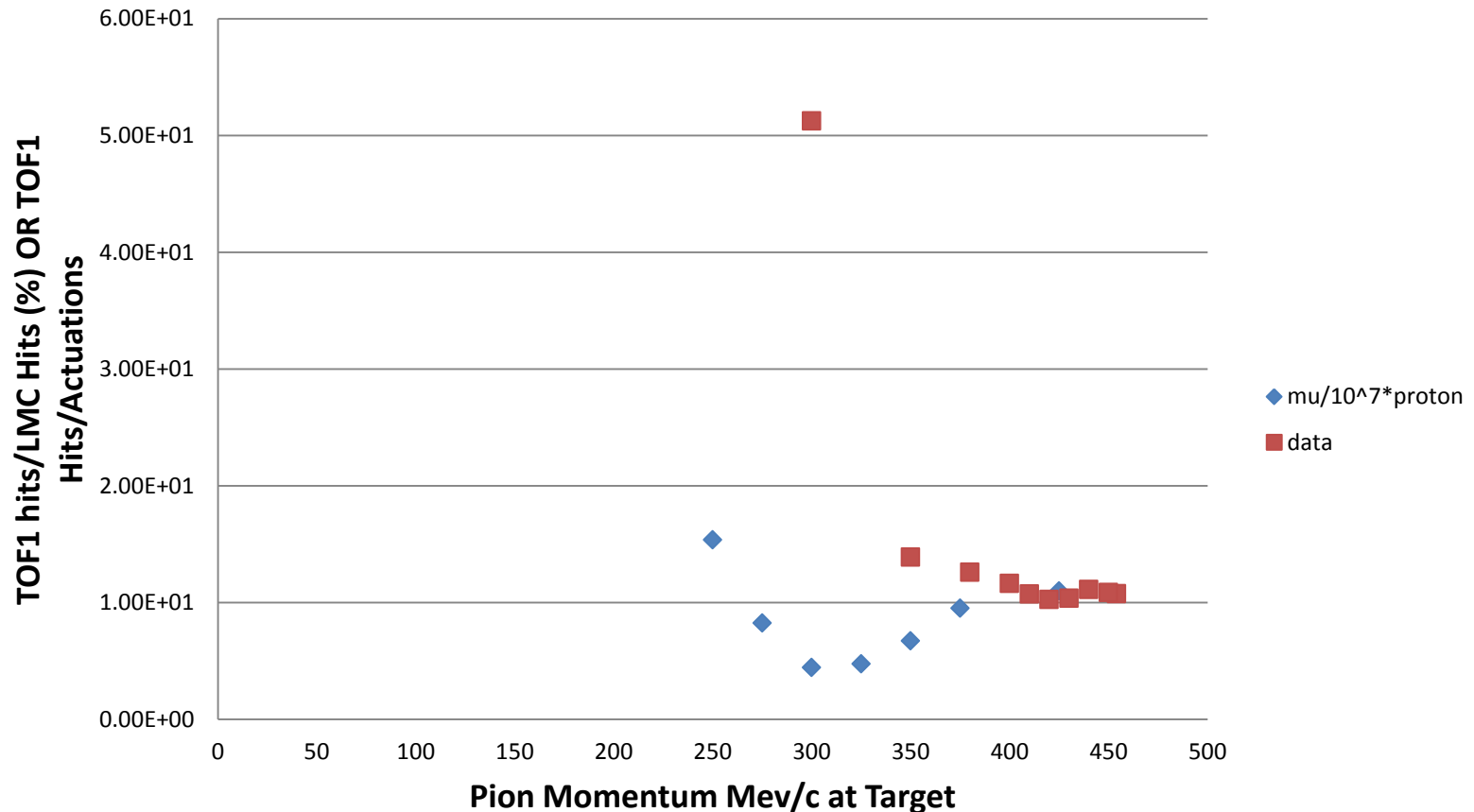
● Int TOF1/ Actuations - No LMC Data

× Int TOF1/ Actuations

× Int TOF1/Int LMC1234 (%)

Simulations vs Data

- Which particles are in the data?



Included absorber G4BL deck

- 140 MeV beam 44 mm (29 mm) absorber
- 200 MeV beam 83 mm absorber
- 240 MeV beam 147 mm absorber
- Absorber material is polyethylene
- Height=Width=180 mm
- Box absorber
- Placed between DkSol and GVA counter

p dist at GVA counter

- 6-200 beam
- Momentum is decreased by approx 20 MeV/c

