

Ar Meeting

Check offset from optics matrix

Jun 15, 2017

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Formula from Dien's slides:

$$Y_{tg_off} = -Spec_{off} - tg_{off} * \sin(\theta) + xbeam_{off} * \cos(\theta) + Y_{off}$$

- Assume $tg_{off} = 0$; Y_{off} is the offset from optics

Run#	target	P0(GeV)	theta	Spec_off (mm)	Xbeam_off (mm)	Ytg_off (mm)	Y_off (mm)
730	C	2.160	15.541	0.98	-0.223617	-2.04358	-0.848141
731	C	2.030	15.541	0.98	-0.214774	-2.03633	-0.849411
739	C	1.909	15.541	0.98	-0.227731	-2.11115	-0.911746
740	C	1.794	15.541	0.98	-0.22208	-2.11083	-0.916868
747	C	1.686	15.541	0.98	-0.213969	-2.12771	-0.941562
748	C	1.585	15.541	0.98	-0.22826	-2.16923	-0.969315
755	C	1.490	15.541	0.98	-0.219059	-2.19443	-1.00338
756	C	1.401	15.541	0.98	-0.223343	-2.20027	-1.00509
763	C	1.317	15.541	0.98	-0.217041	-2.23729	-1.04819

Check for some other runs

	Run#	Target	P0(GeV)	theta	Spec_off	Xbeam_off	Ytg_off	Y_off
kin1	412	Ti	1.777	21.504	1.74	1.2254	-1.90318	-1.30327
kin1	903	Ti	1.799	21.505	1.68	-0.2171	-3.57851	-1.69796
kin2	844	Ti	1.716	20.004	1.89	-0.2293	-3.71649	-1.61783
kin3	516	Ti	1.799	17.510	0.9	-0.2552	-2.3327	-1.19198
kin4	627	Ti	1.799	15.541	0.98	-0.2163	-2.31141	-1.12244
kin5	741	Ti	1.794	15.541	0.98	-0.2369	-2.19473	-0.98483

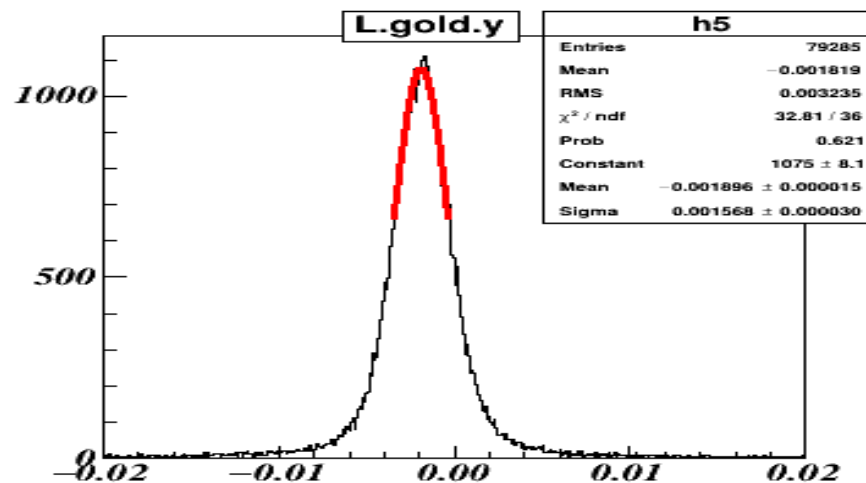
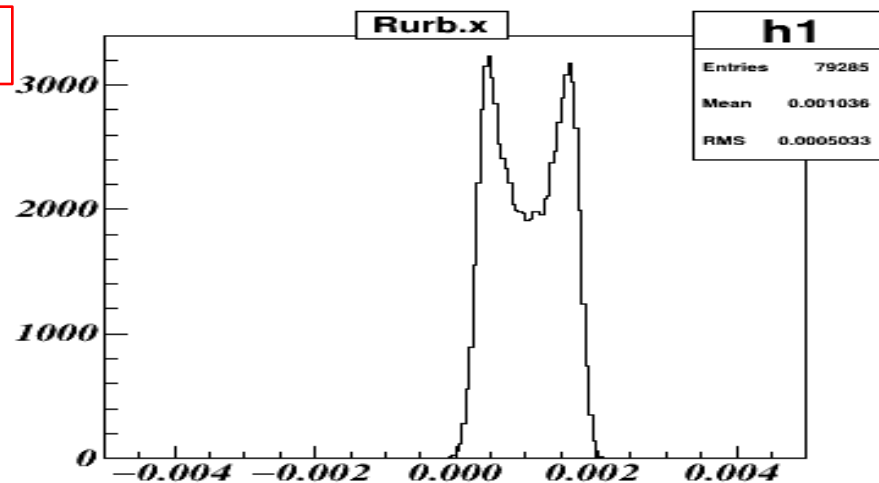
	Run#	Target	P0(GeV)	theta	Spec_off	Xbeam_off	Ytg_off	Y_off
kin1	374	C	1.777	21.504	1.74	1.037	-1.89633	-1.11991
kin1	904	optics	1.799	21.505	1.68	-0.2157	-3.66828	-1.78760
kin2	834	C	1.716	20.004	1.89	-0.224	-3.51477	-1.41375
kin3	472	optics	1.799	17.510	0.9	-0.2593	-2.52470	-1.37745
kin4	567	C	1.799	15.541	0.98	-0.2517	-2.14226	-0.91970

Plan For Next Week

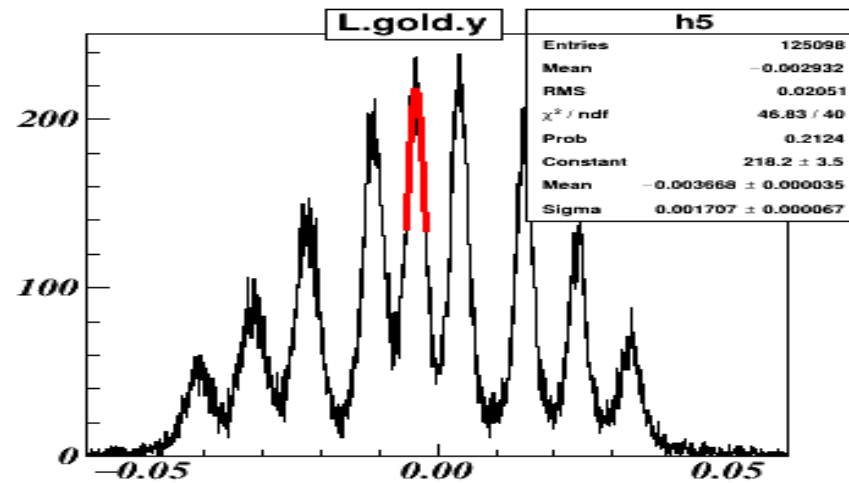
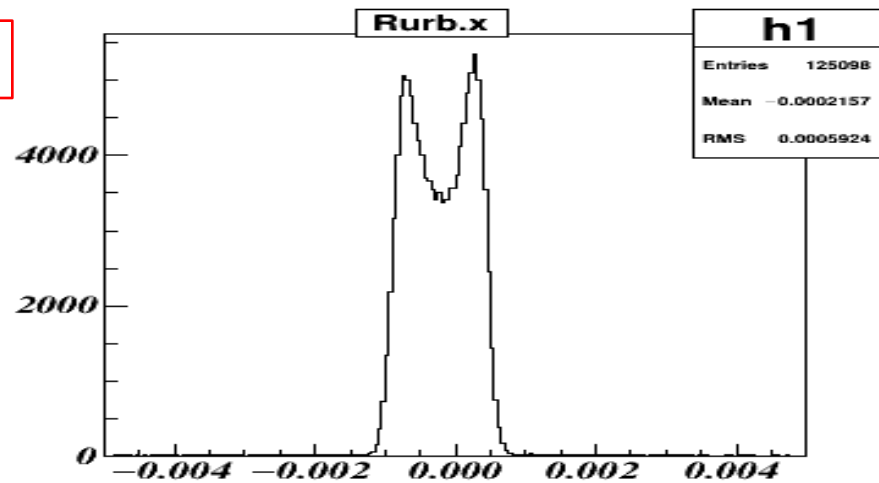
- Calculate detector efficiency bin by bin : $\text{eff}(\theta, \phi, dp/p)$

Plots

run374

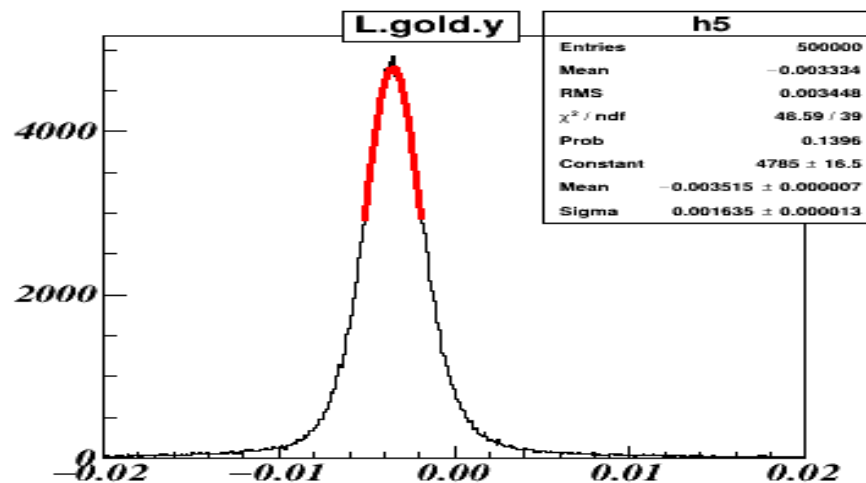
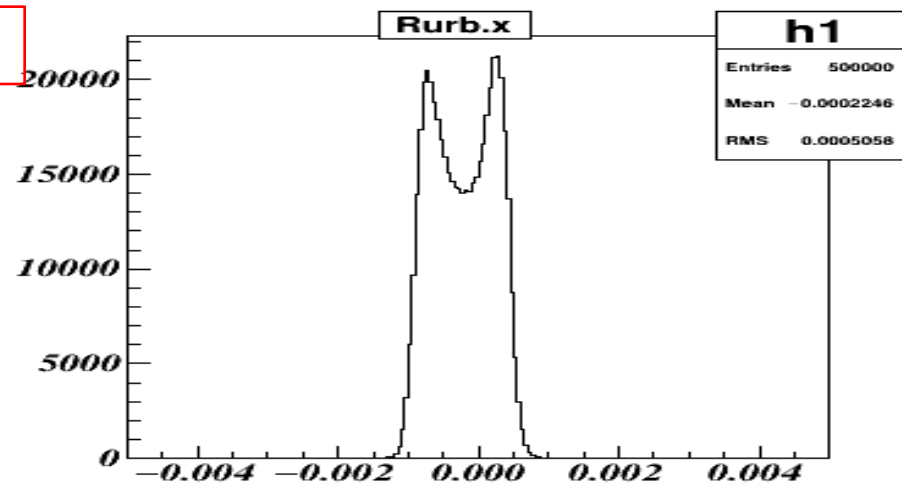


run904

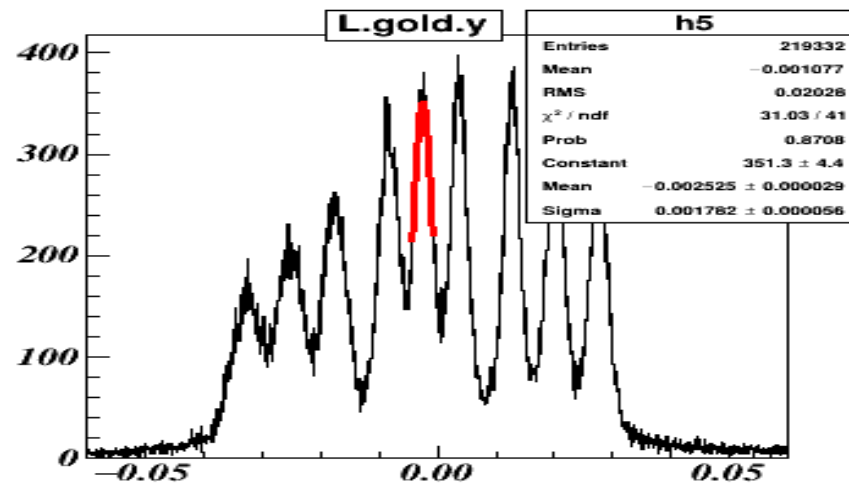
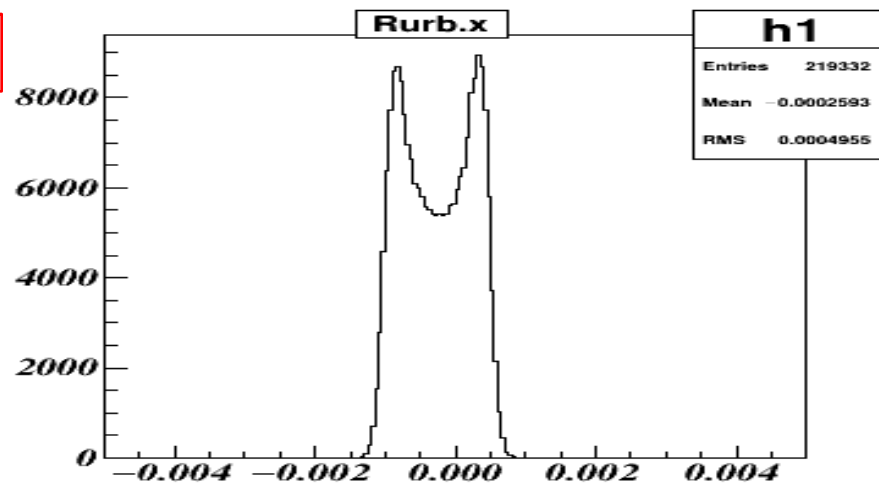


Plots

run834



run472



Plots

run834

