

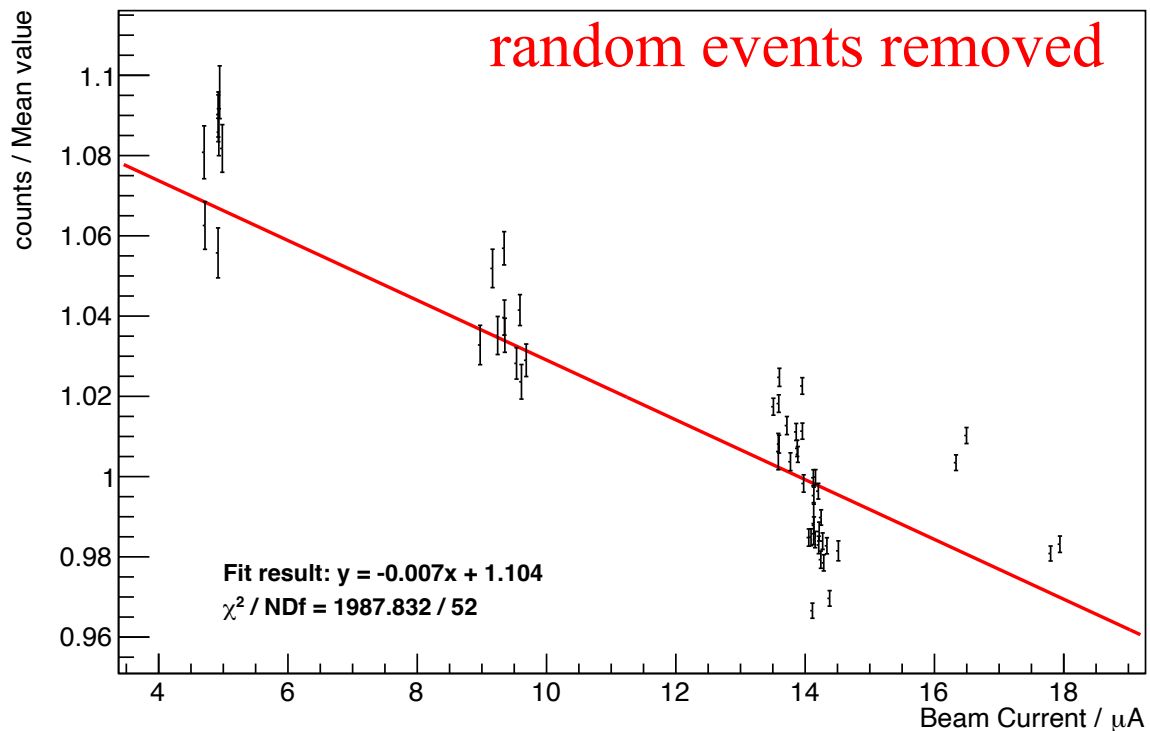
Charge normalized event counts

LD2, $145 < clusT < 155$

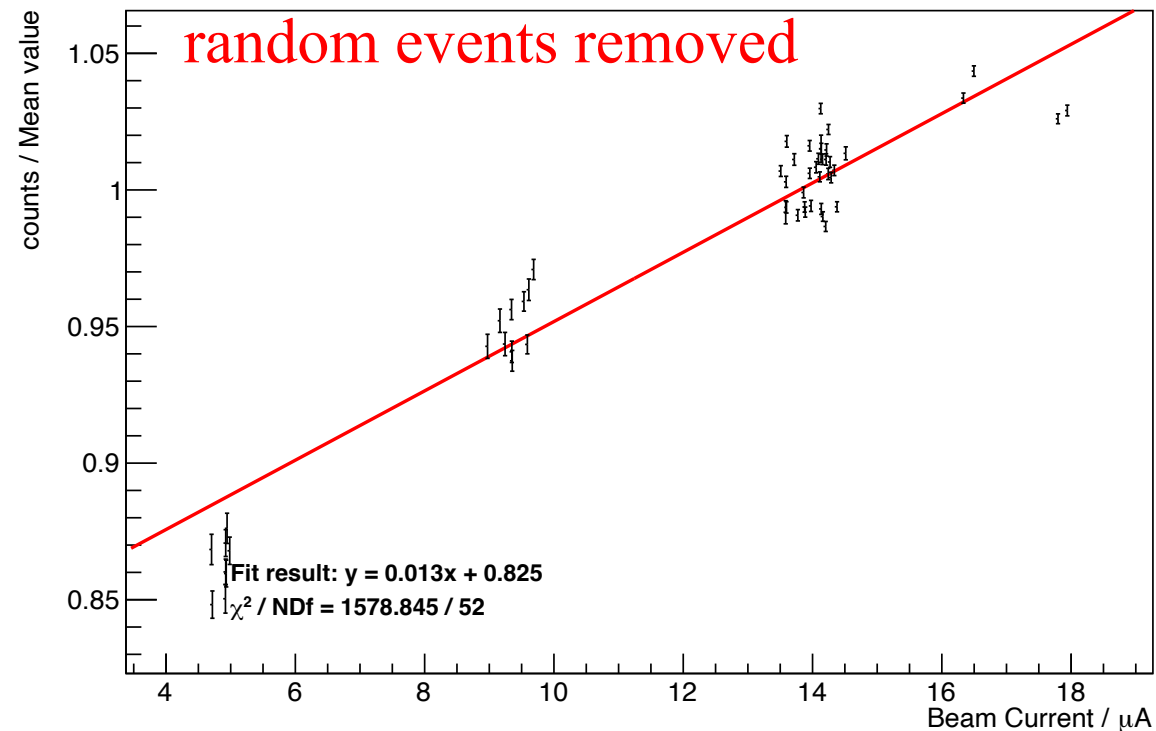
Only ps6 production good runs

Charge normalized DVCS events(LD2) / Mean value

Charge normalized DVCS events(LD2) / Mean value



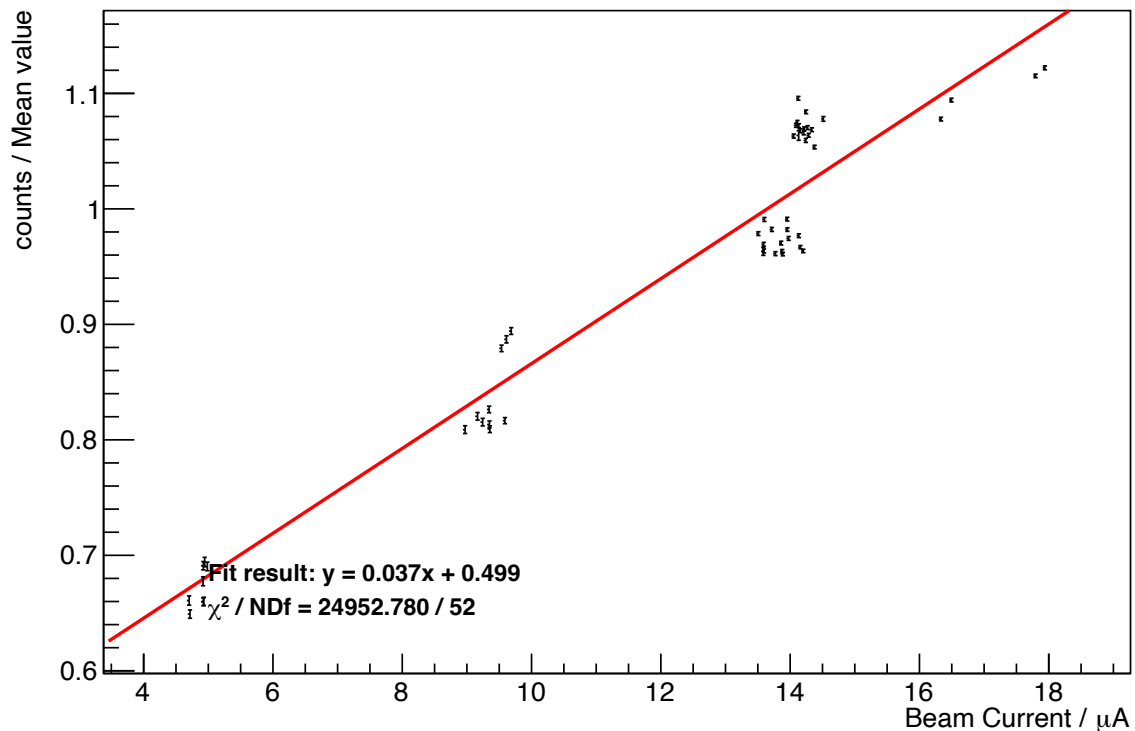
$clusE_{max} > 1.2$



$clusE > 1.2$

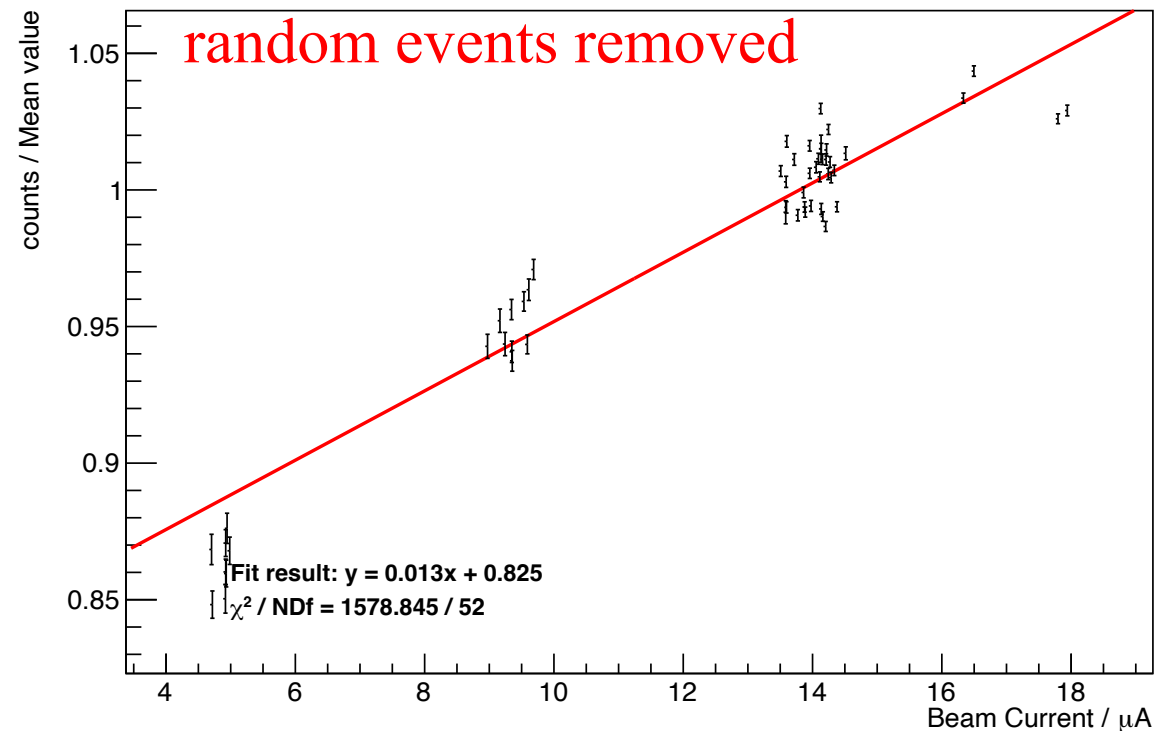
Only ps6 production good runs

Charge normalized DVCS events(LD2) / Mean value



$clusE > 1.2$

Charge normalized DVCS events(LD2) / Mean value



$clusE > 1.2$

Slope after random events subtraction

LD2	$E_{max} > 1.2$	All $E > 1.2$
6ns time window	-0.0107	0.0078
10ns time window	-0.0074	0.0127
14ns time window	-0.0056	0.0146

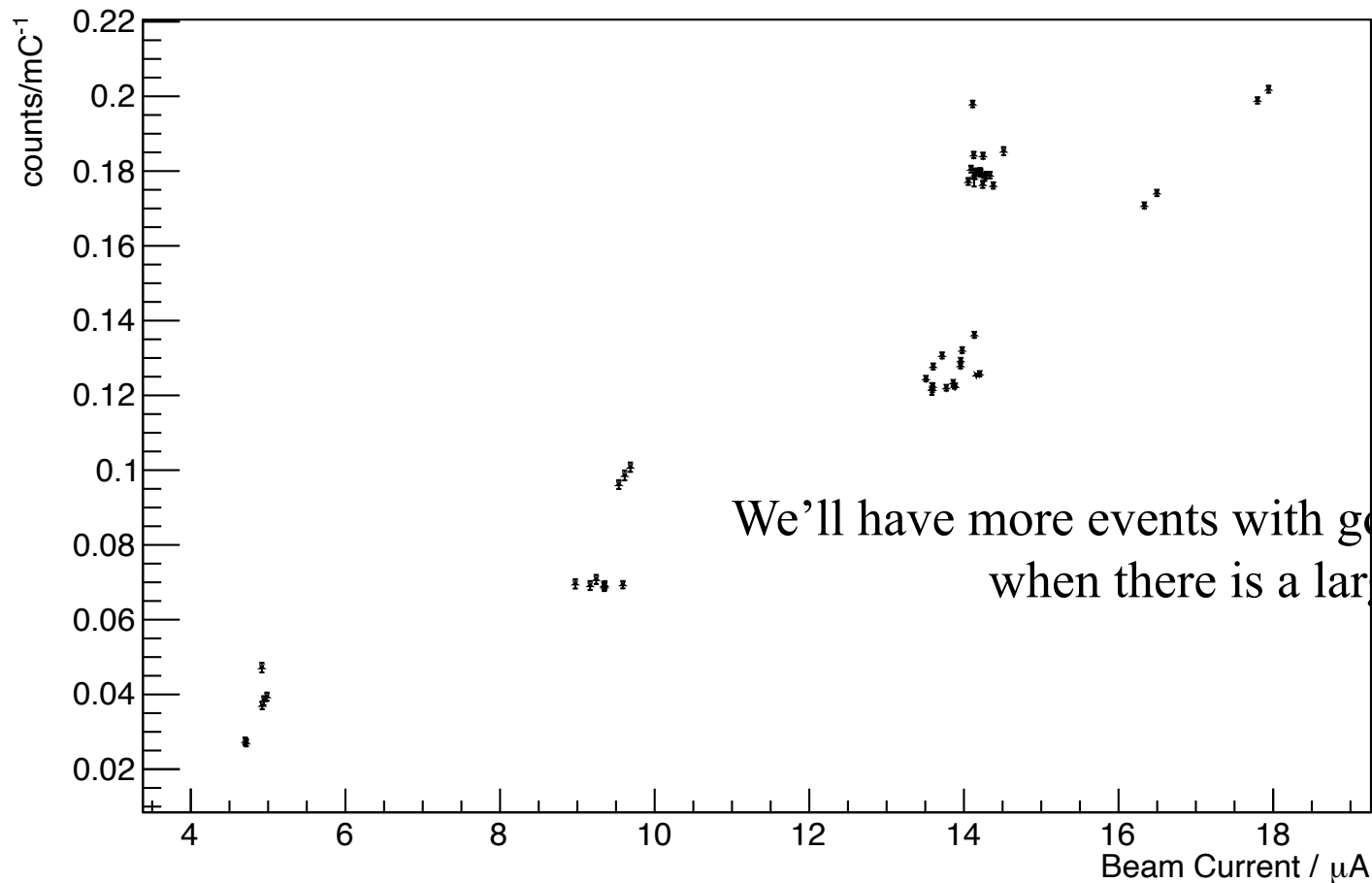
LH2	$E_{max} > 1.2$	All $E > 1.2$
6ns time window	-0.0054	0.0039
10ns time window	-0.0043	0.0050
14ns time window	-0.0036	0.0056

Charge normalized event counts

How many events we have which:

- have only **one** cluster with good clusT
- but it's not the E_{max} cluster

Charge normalized DVCS events(LD2)(Not the Emax cluster) / Emax DVCS events



We'll have more events with good time but not Emax cluster when there is a larger beam current.

Charge normalized event counts

Summary:

- We're missing some events if we only care about the Emax cluster
- But we'll definitely count more events if we loop all the clusters for each event

A relevant issue(maybe):

The branch "NPS.cal.nclust" may not be correct...

I noticed this because sometimes it could be 0 but it's obviously wrong

	clusE[0]	clusE[1]	clusE[2]	clusE[3]
NPS.cal.nclust ==1	0.576846	0.217298	0.448073	0
	0.912263	0 0	0	
	0.343321	0.0785455	0 0	
	0.564033	0 0	0	
	0.123109	0.162467	0.368234	0
	1.06437 0	0 0		
	1.71902 0	0 0		
	1.7306 0.625246	0.850106	0.0782768	
	0.782548	0 0	0	
	1.69235 0	0 0		
	1.84368 0	0 0		
	0.0668847	0 0	0	

Charge normalized event counts

How many good clusters we have for each event (good time and $E > 1.2$)

