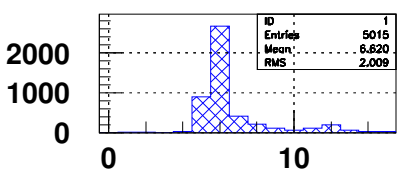
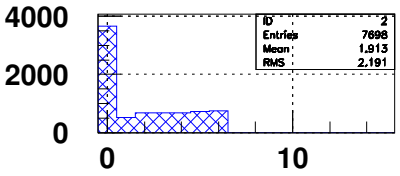
98/11/20 18.11

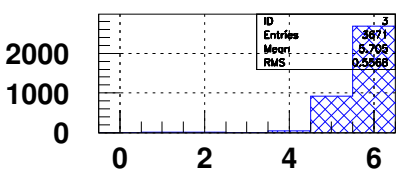
CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98



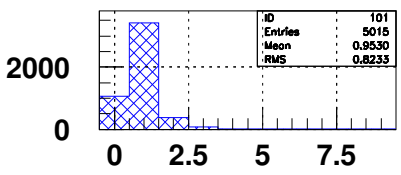
Anode hits, total



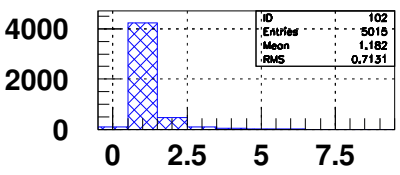
Event multiplicity type



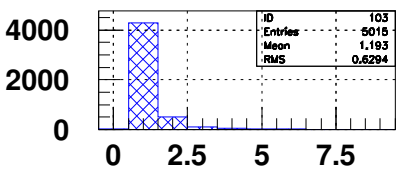
Nmb of planes with mult=1



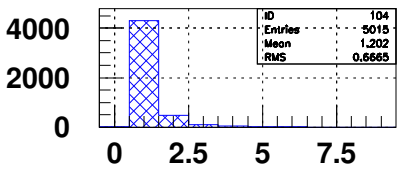
Nhits Pl 1



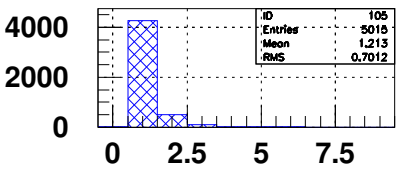
Nhits Pl 2



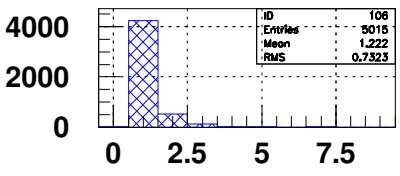
Nhits Pl 3



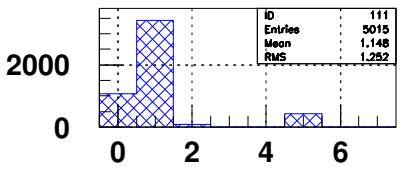
Nhits Pl 4



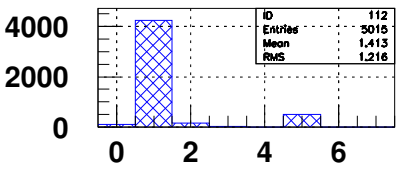
Nhits Pl 5



Nhits Pl 6



Mlt Pl 1



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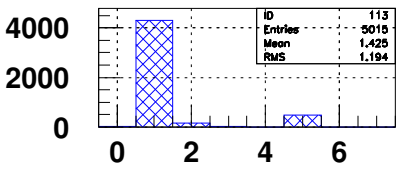

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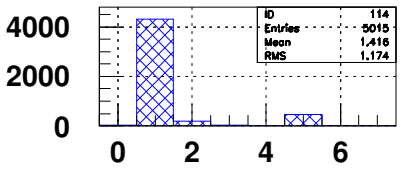

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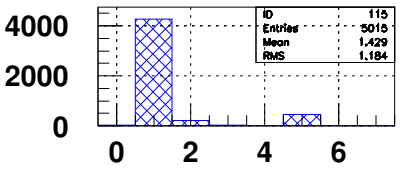

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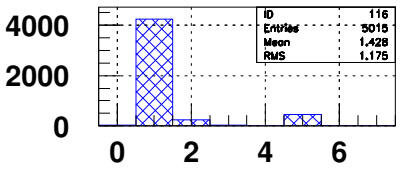
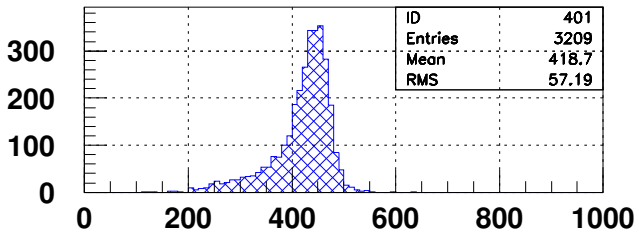


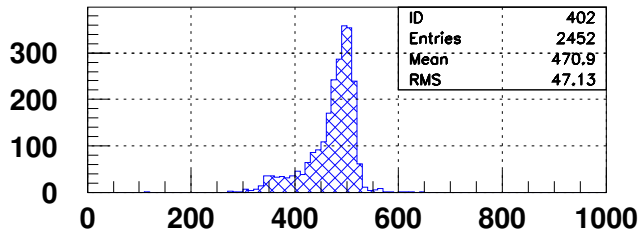
Mlt Pl 6

98/11/20 18.11

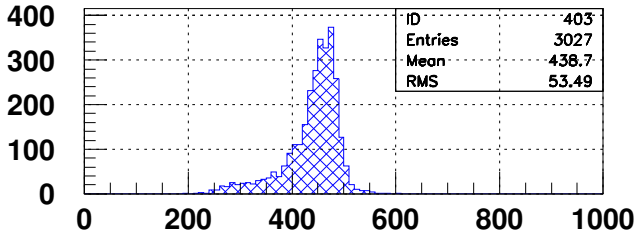
CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98



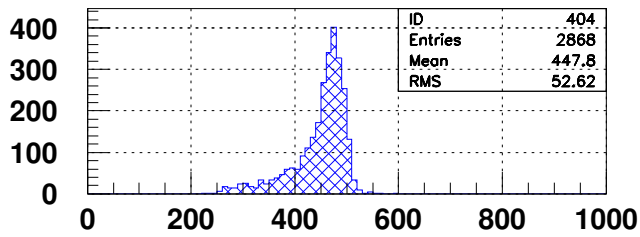
bc1−lead (L+R), ch



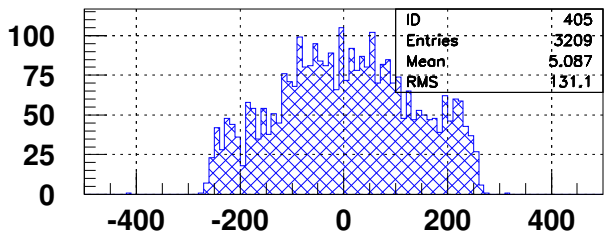
bc1−lead (U+D), ch



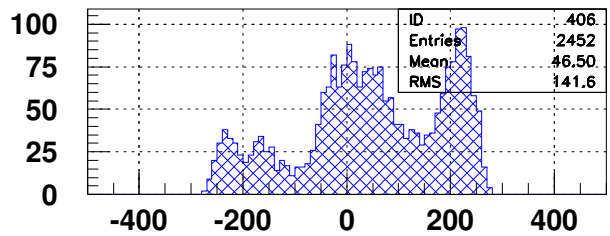
bc2−lead (L+R), ch



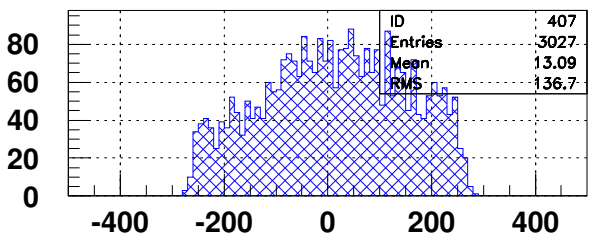
bc2−lead (U+D), ch



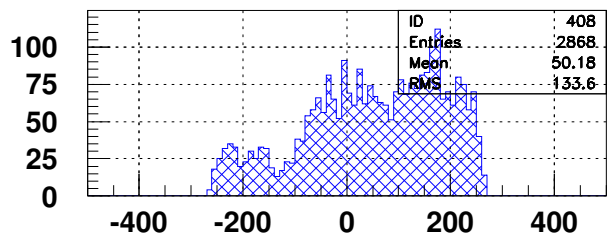
bc1−lead (L−R), ch



bc1−lead (U−D), ch



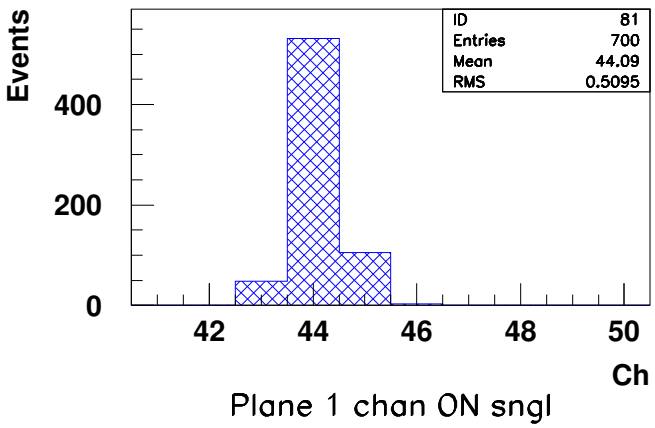
bc2−lead (L−R), ch



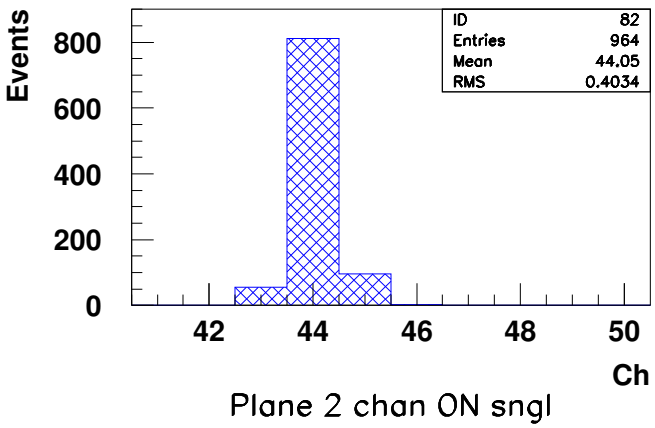
bc2−lead (U−D), ch

98/11/20 18.12

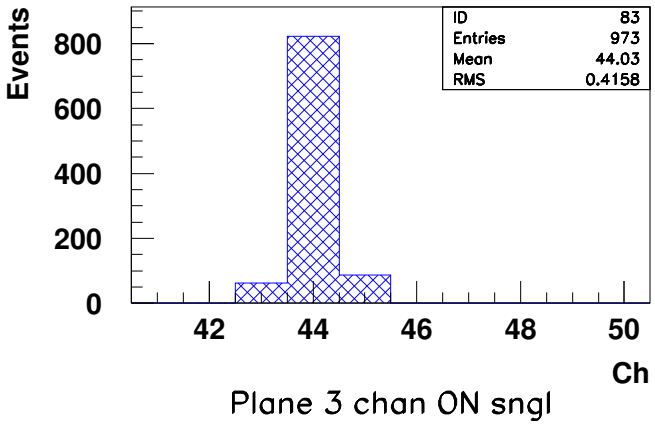
CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98



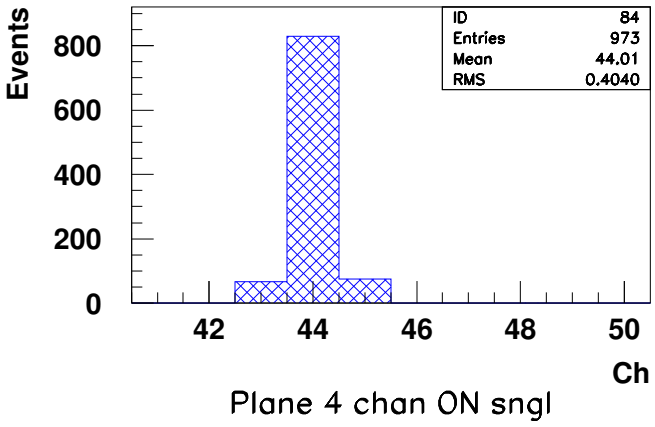
Plane 1 chan ON sngl



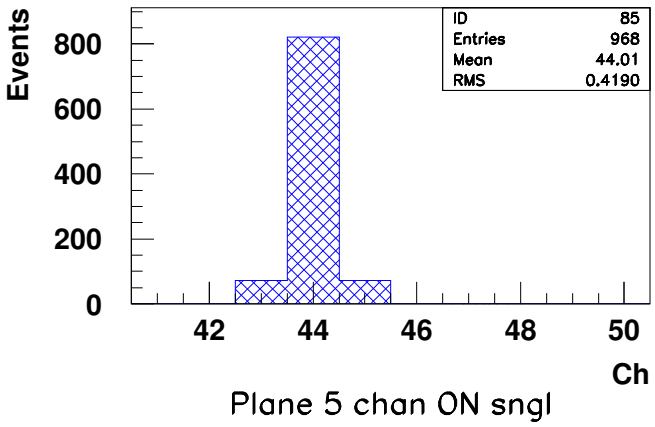
Plane 2 chan ON sngl



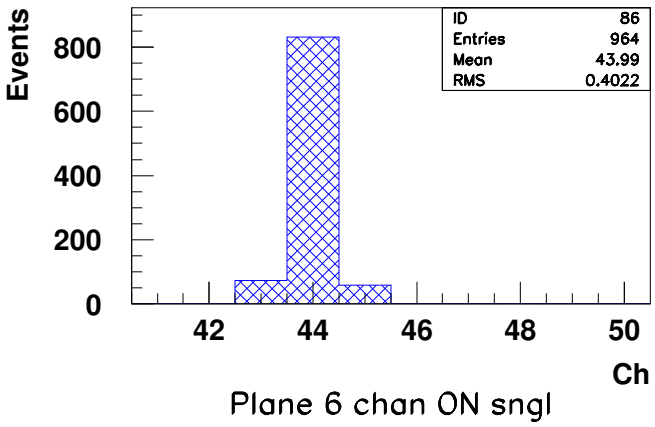
Plane 3 chan ON sngl



Plane 4 chan ON sngl



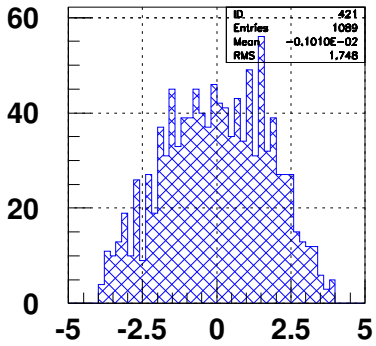
Plane 5 chan ON sngl



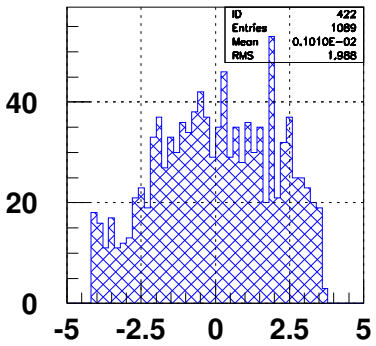
Plane 6 chan ON sngl

98/11/20 18.12

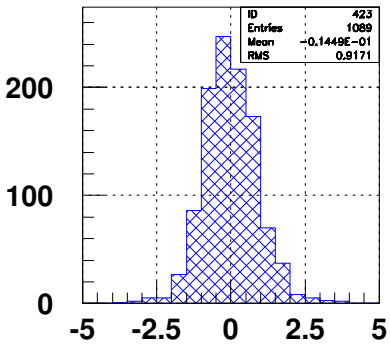
CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98



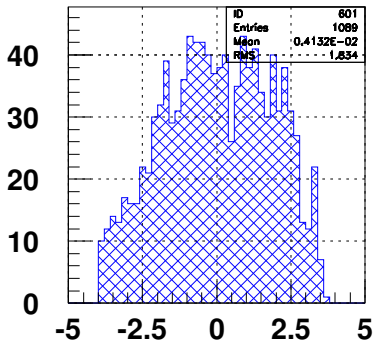
X1 – avx(1) cm



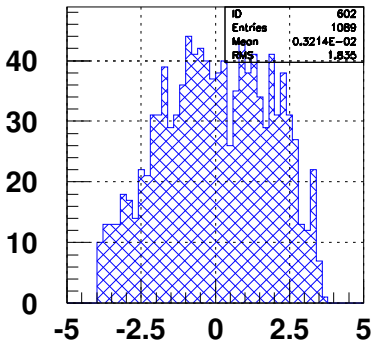
X2 – avx(2) cm



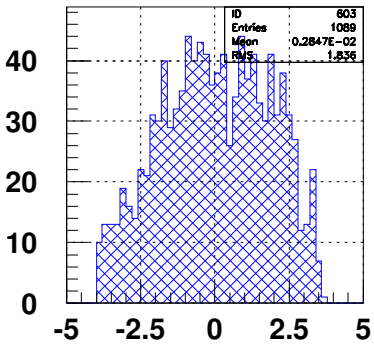
THETX mrad



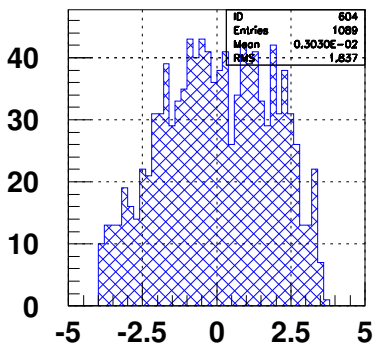
Xp Plane 1



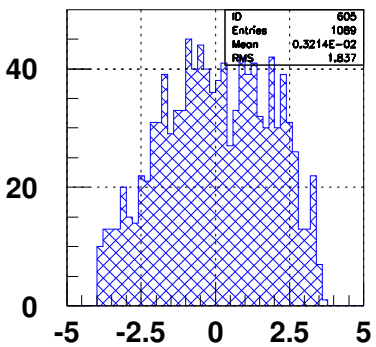
Xp Plane 2



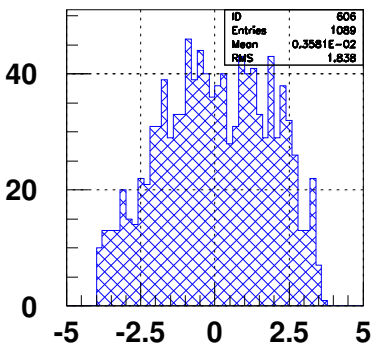
Xp Plane 3



Xp Plane 4



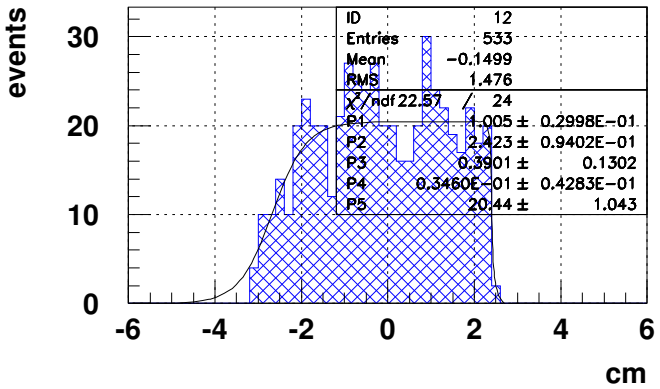
Xp Plane 5



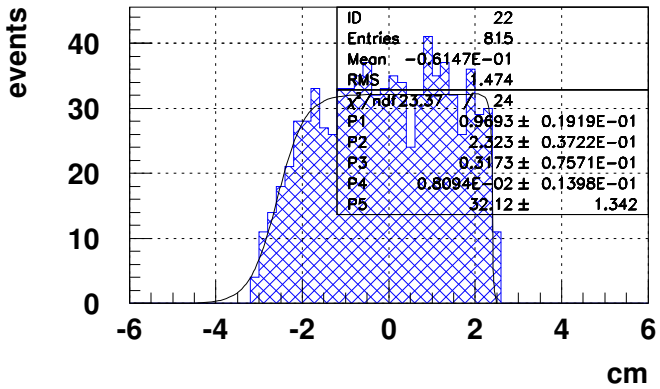
Xp Plane 6

98/11/20 18.12

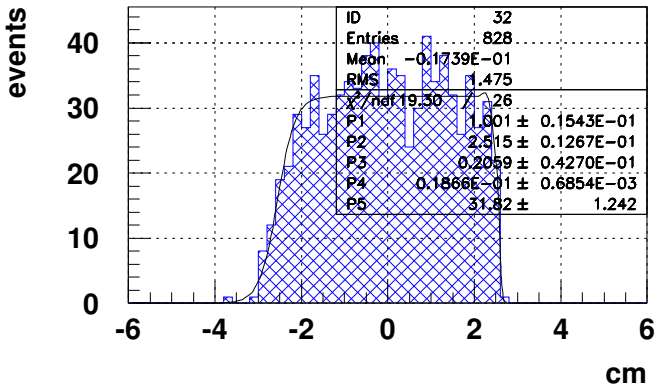
CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98



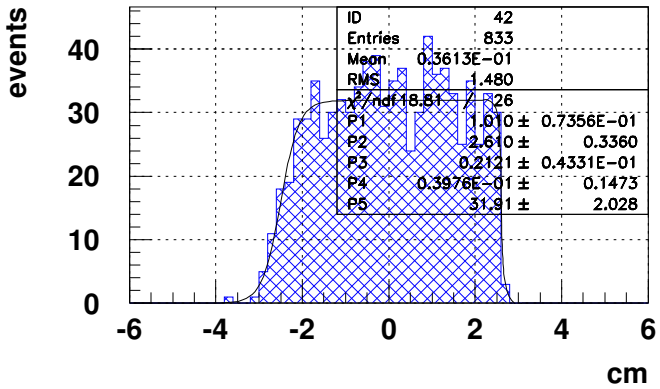
Xpr pl 1 ch 44 ON sng



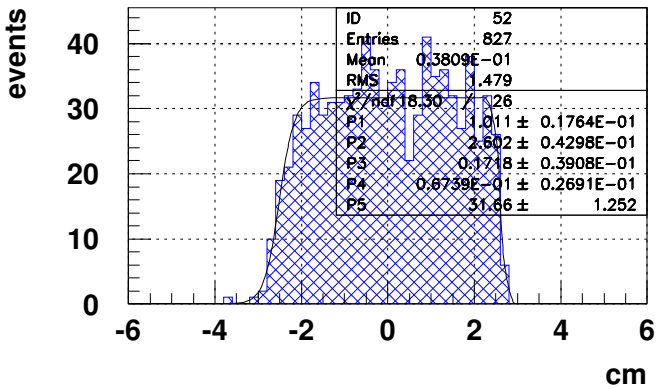
Xpr pl 2 ch 44 ON sng



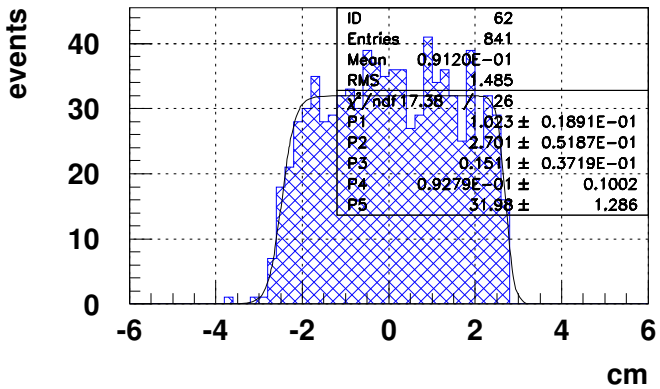
Xpr pl 3 ch 44 ON sng



Xpr pl 4 ch 44 ON sng



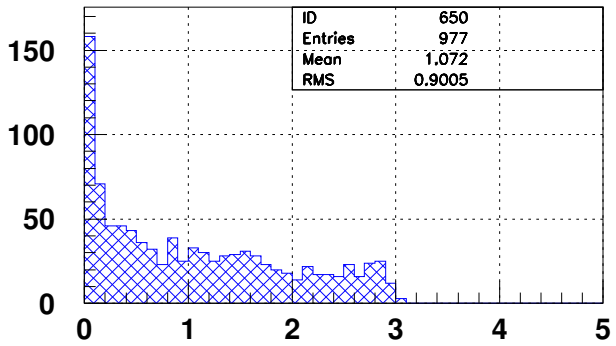
Xpr pl 5 ch 44 ON sng



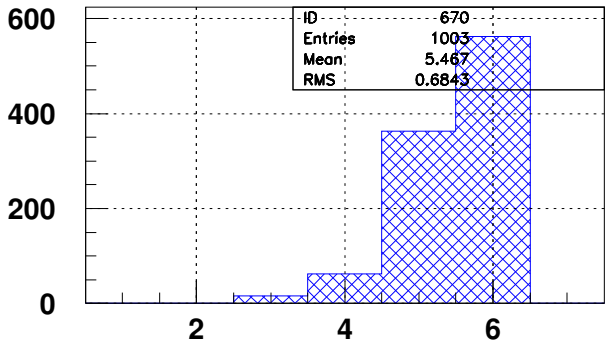
Xpr pl 6 ch 44 ON sng

98/11/20 18.13

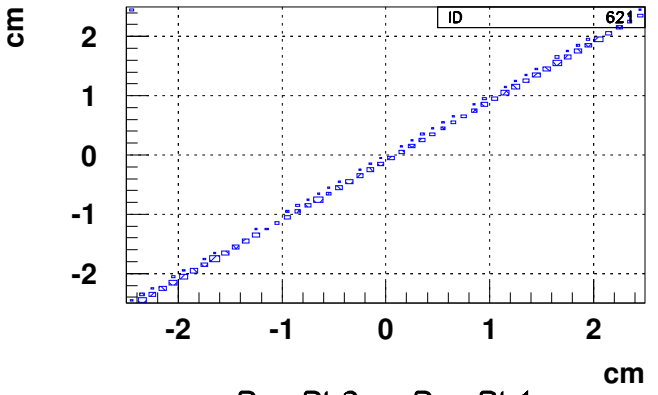
CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98



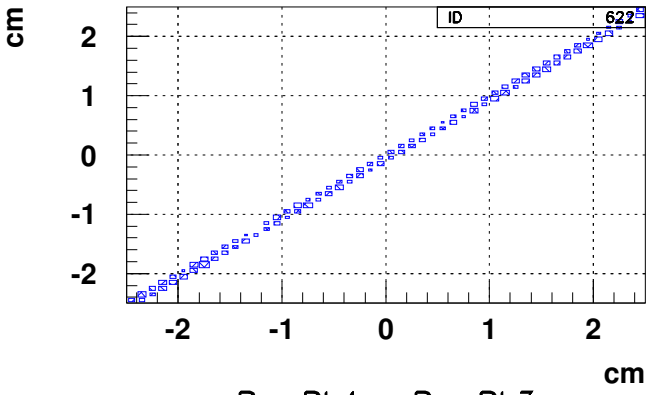
Chi2/NDF



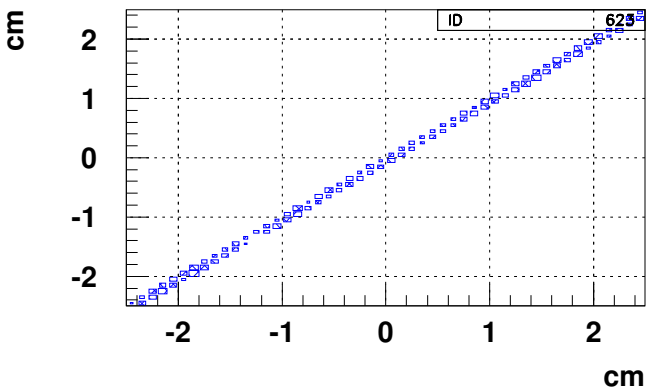
Nmb of anode layers in the fit



Res Pl 2 vs Res Pl 1



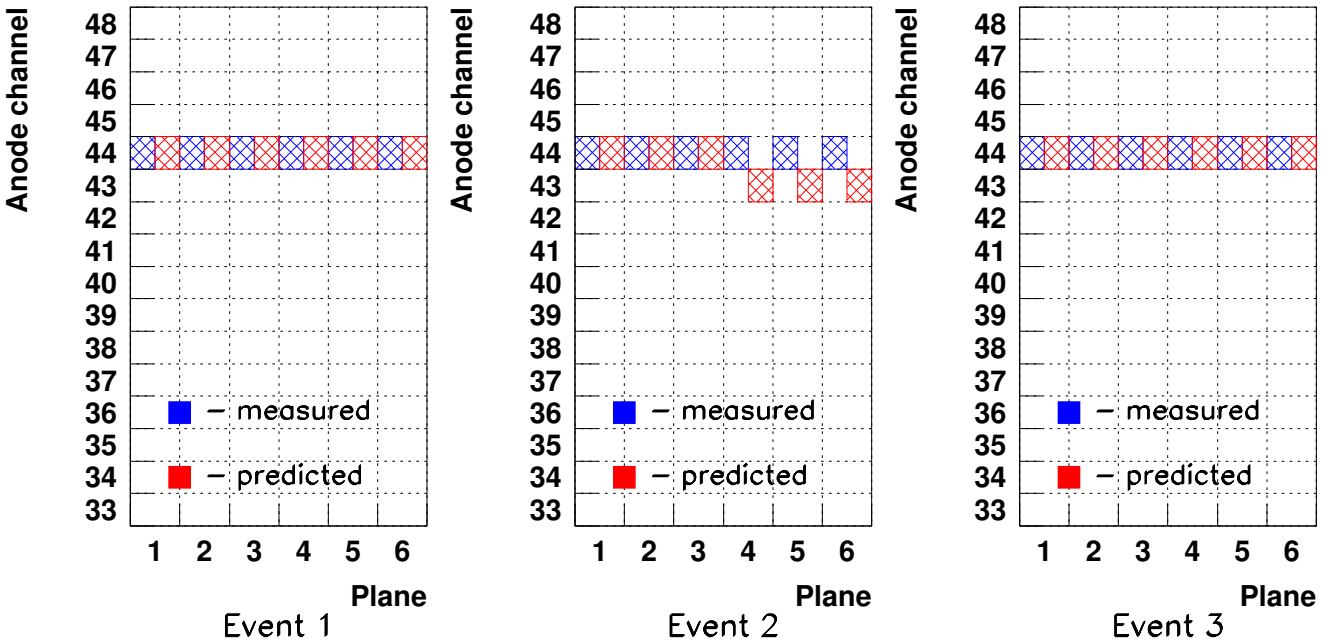
Res Pl 4 vs Res Pl 3



Res Pl 6 vs Res Pl 5

98/11/20 18.13

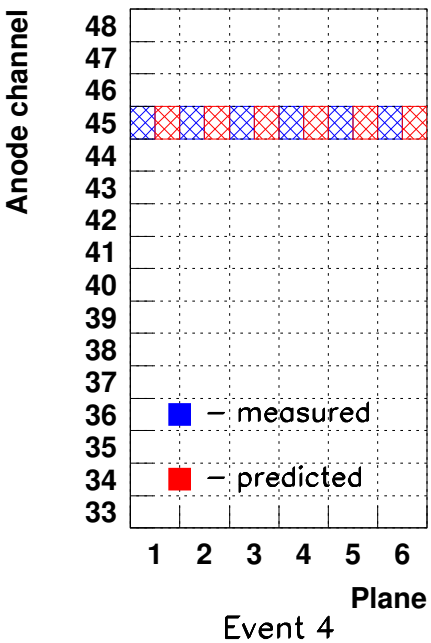
CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98



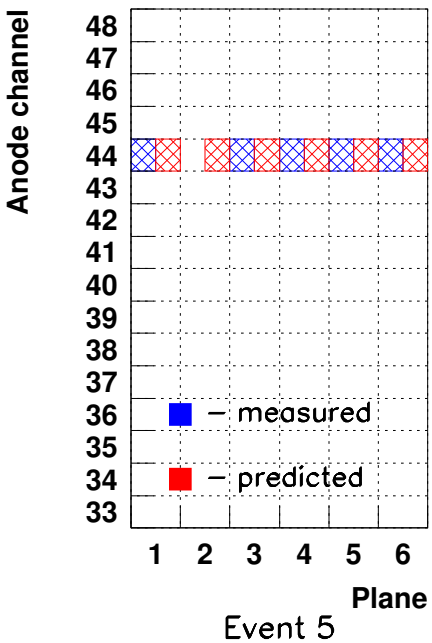
Event 1

Event 2

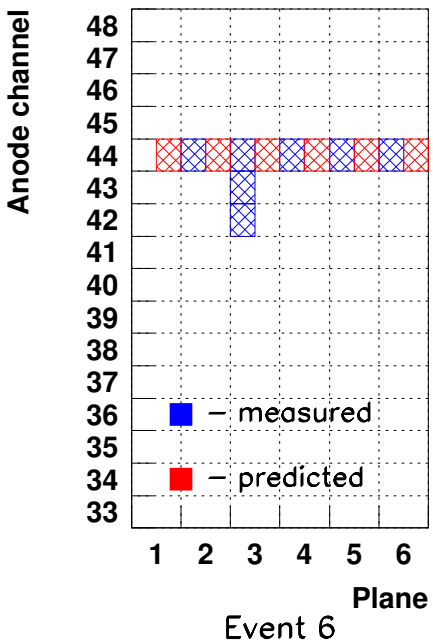
Event 3



Event 4



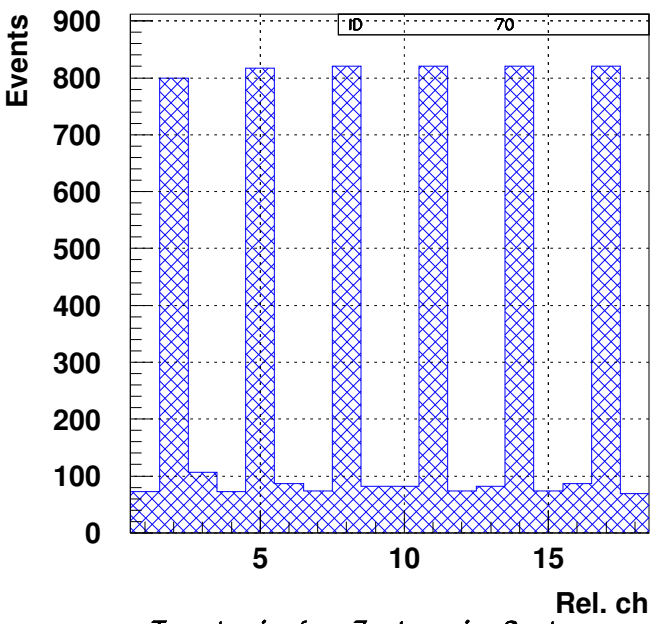
Event 5



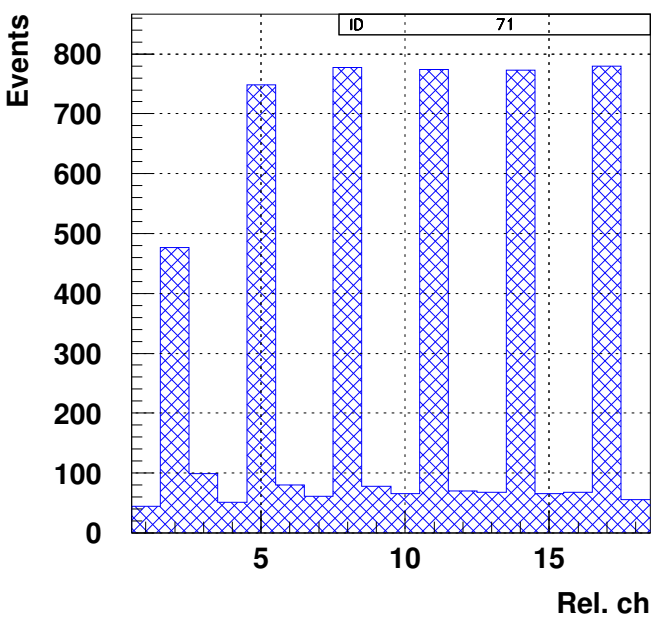
Event 6

98/11/20 18.17

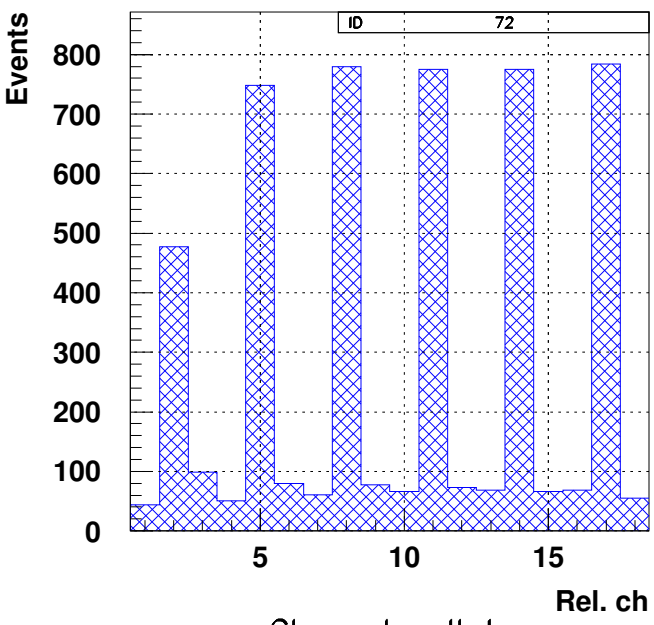
CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98



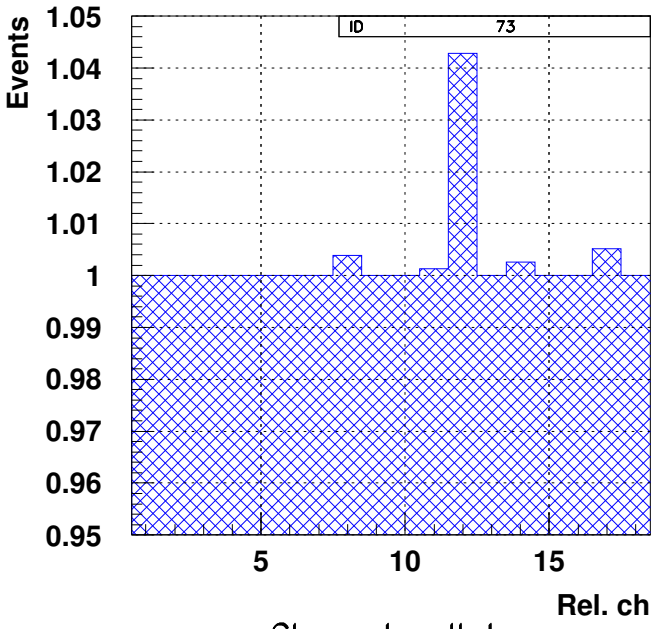
Tracks in for 3 chan in 6 planes



Channels ON

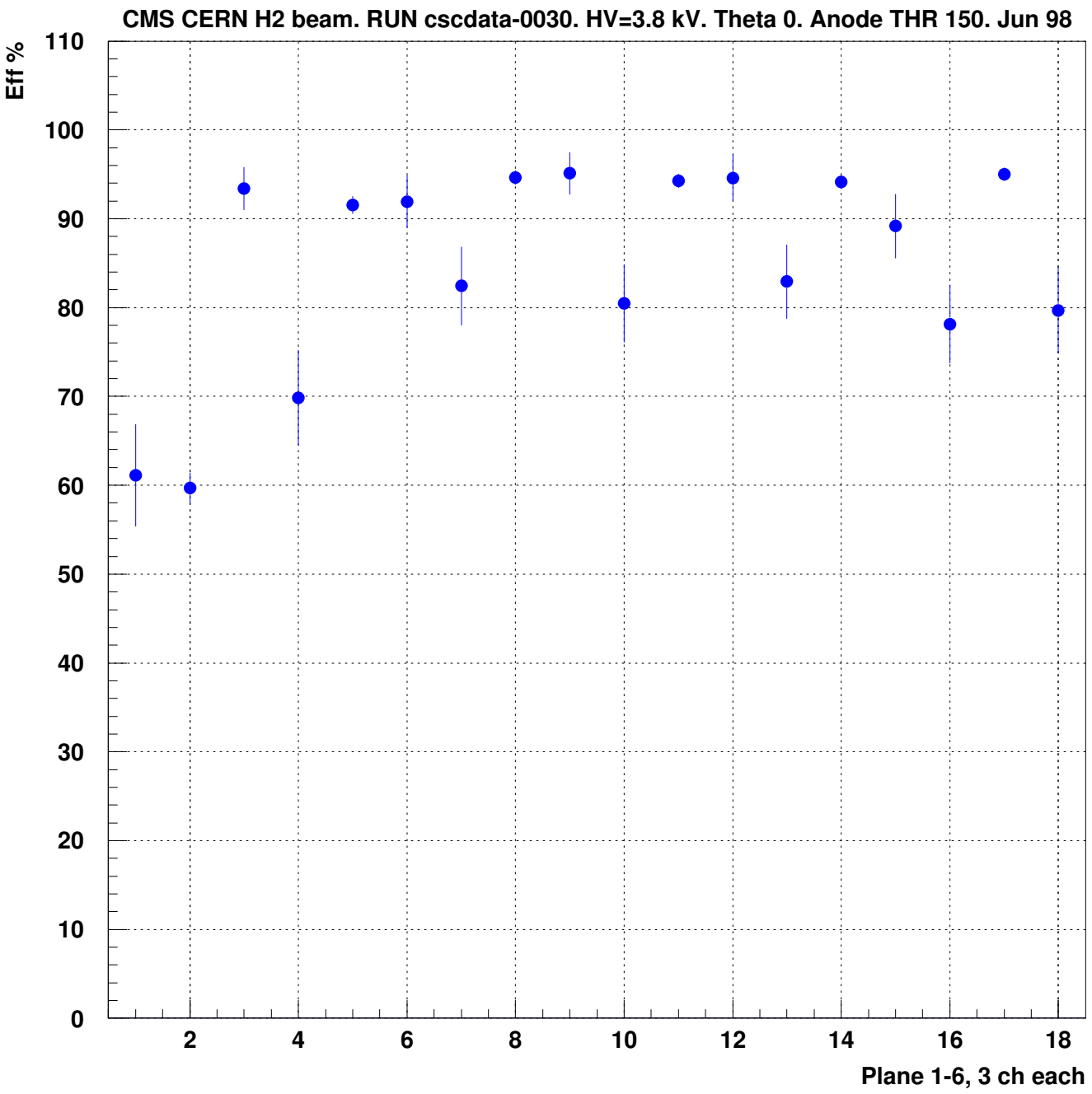


Channels mltplc



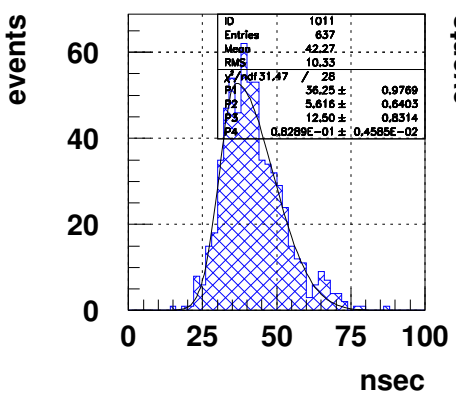
Channels mltplc

98/11/20 18.18

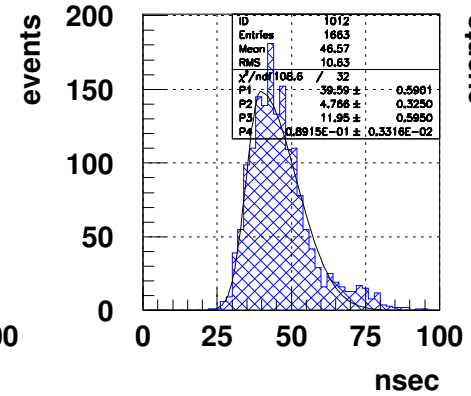

CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98
Eff %
110
100
90
80
70
60
50
40
30
20
10
0
2
4
6
8
10
12
14
16
18
Plane 1-6, 3 ch each

98/11/20 18.18

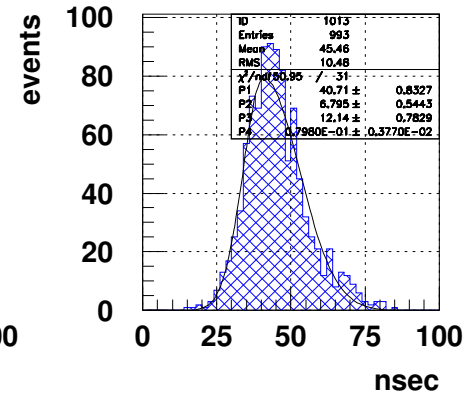
CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98



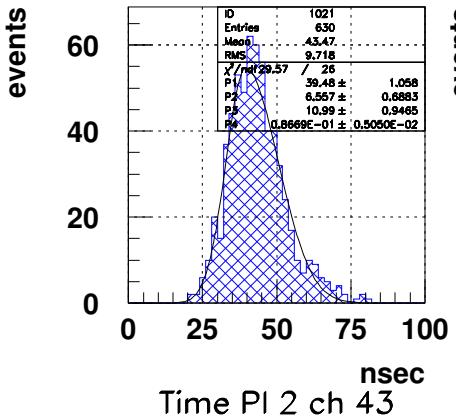
Time PI 1 ch 43



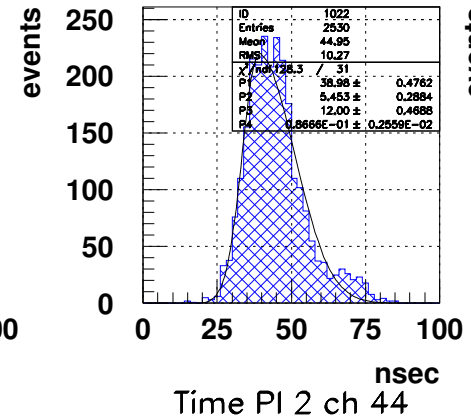
Time PI 1 ch 44



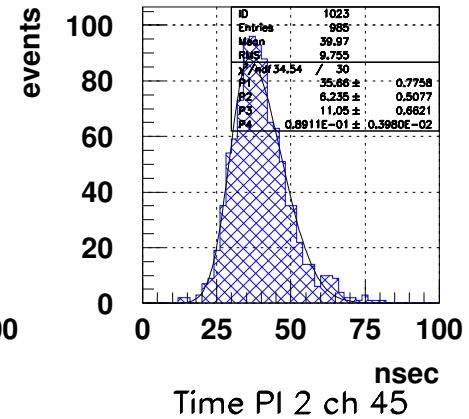
Time PI 1 ch 45



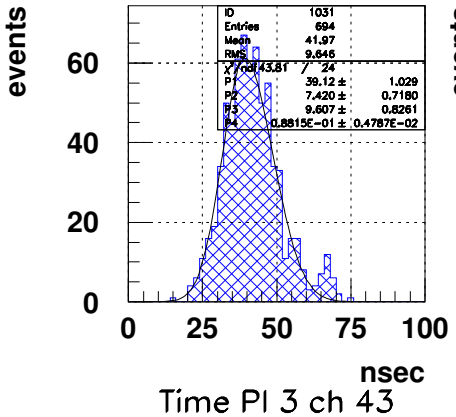
Time PI 2 ch 43



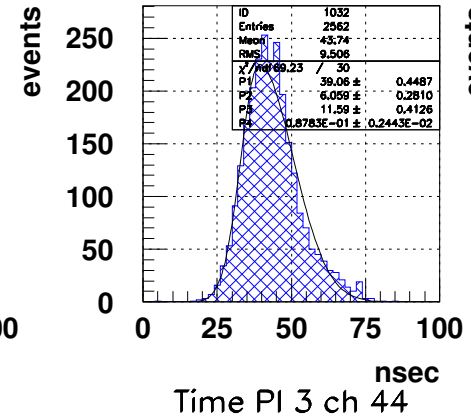
Time PI 2 ch 44



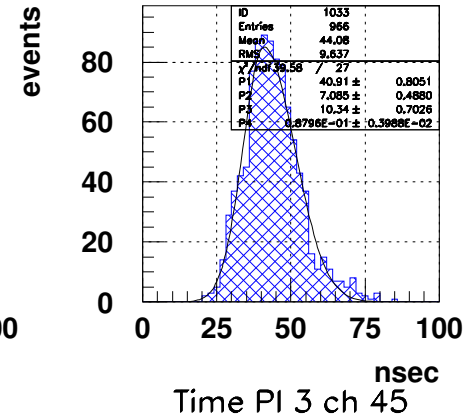
Time PI 2 ch 45



Time PI 3 ch 43



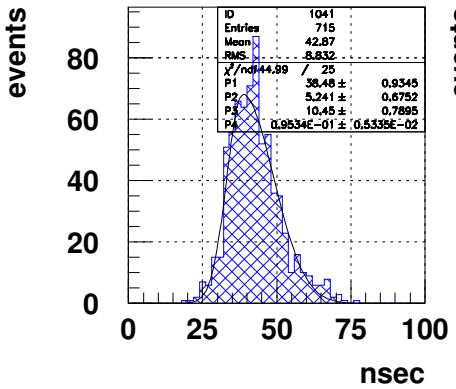
Time PI 3 ch 44



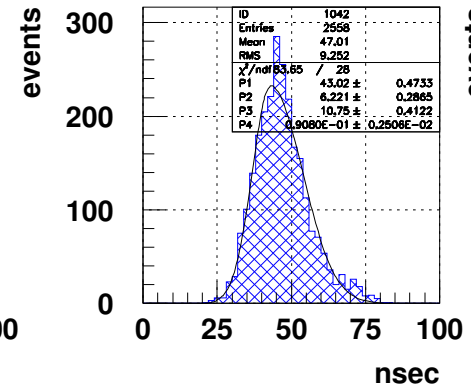
Time PI 3 ch 45

98/11/20 18.18

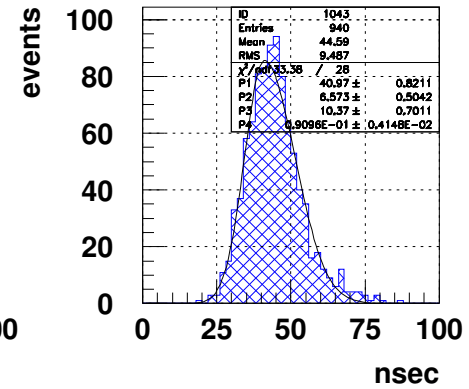
CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98



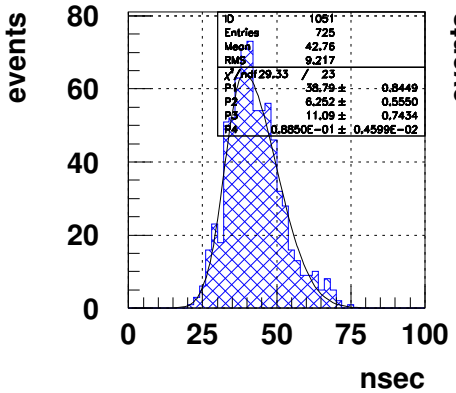
Time PI 4 ch 43



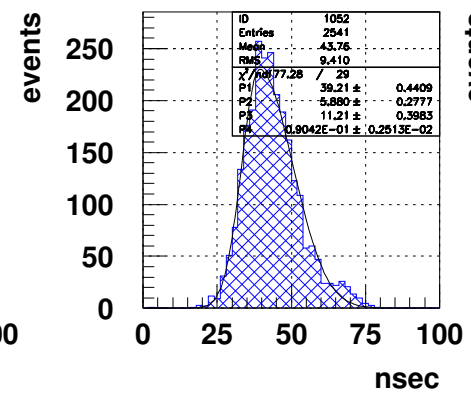
Time PI 4 ch 44



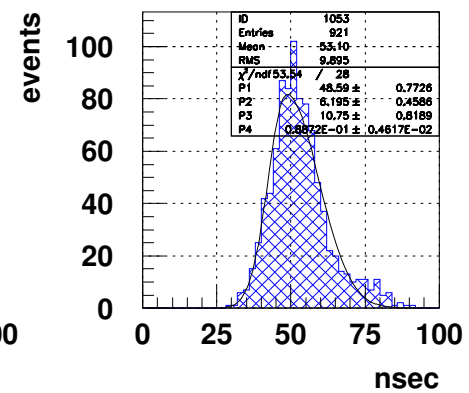
Time PI 4 ch 45



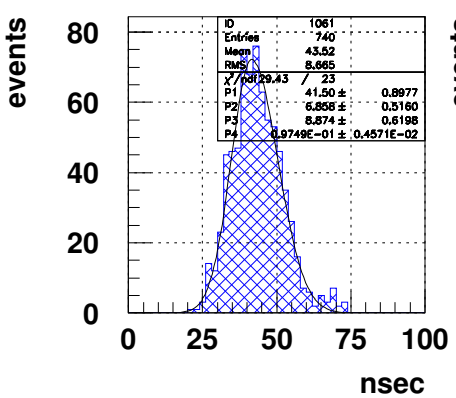
Time PI 5 ch 43



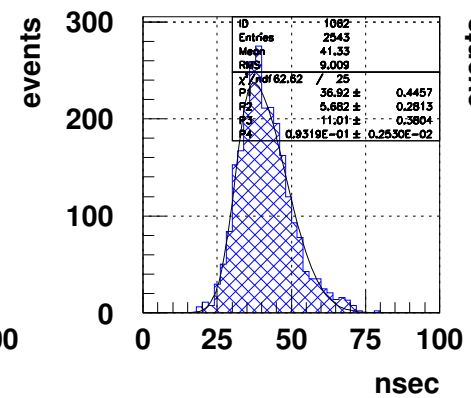
Time PI 5 ch 44



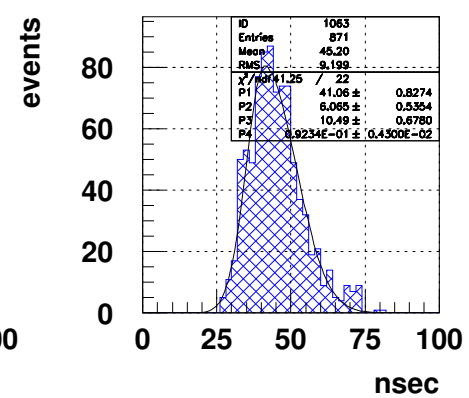
Time PI 5 ch 45



Time PI 6 ch 43



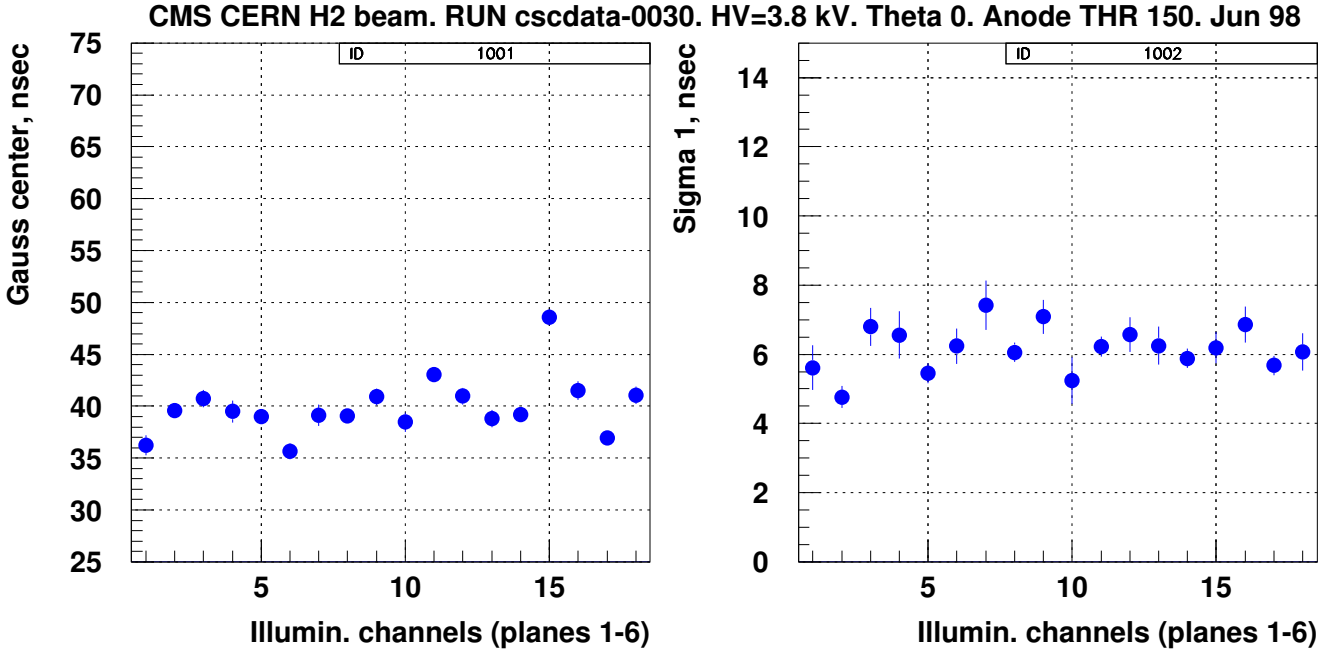
Time PI 6 ch 44

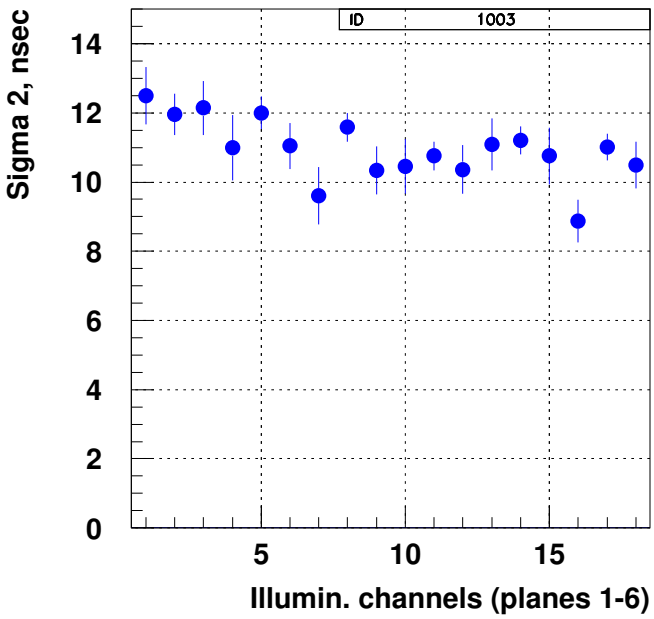


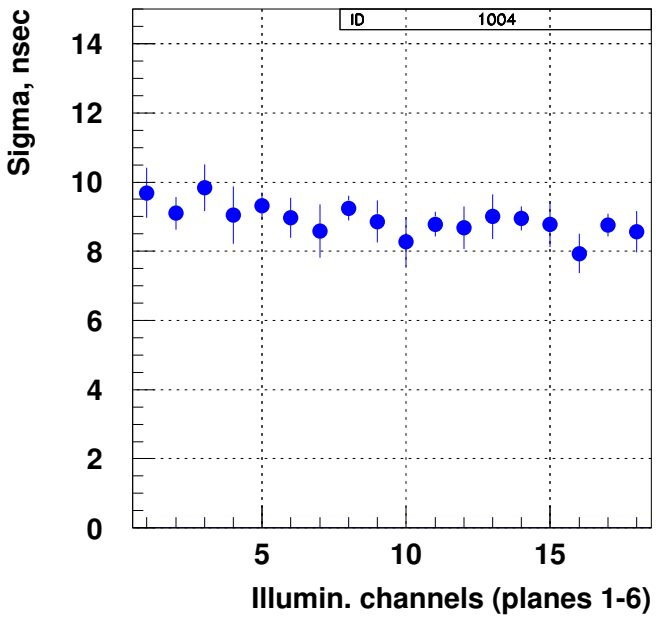
Time PI 6 ch 45

98/11/20 18.19

CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98

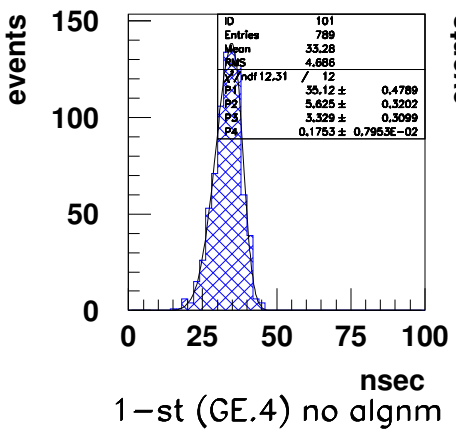




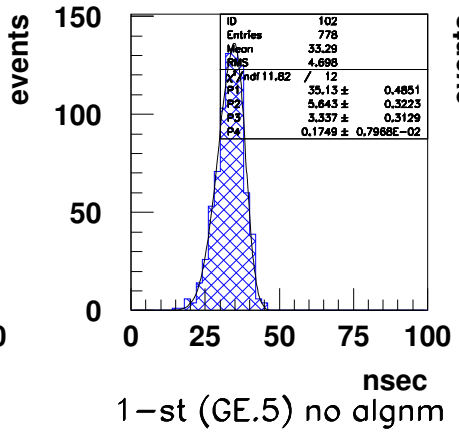


98/11/20 18.19

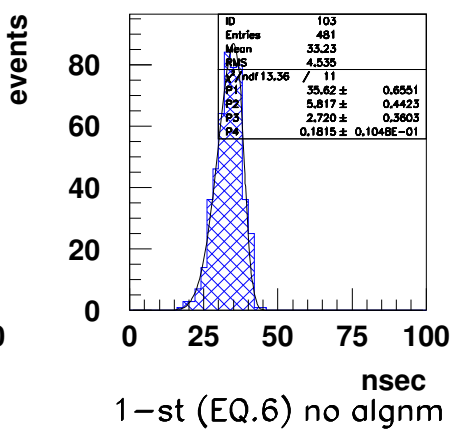
CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98



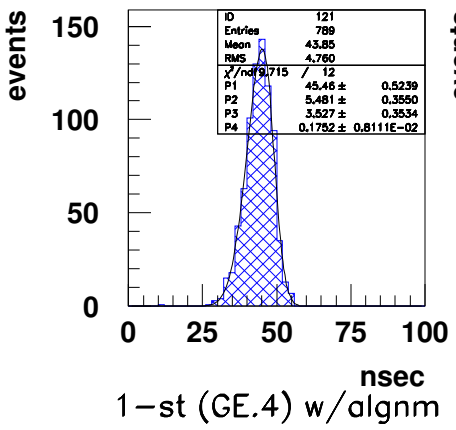
1−st (GE.4) no algnm



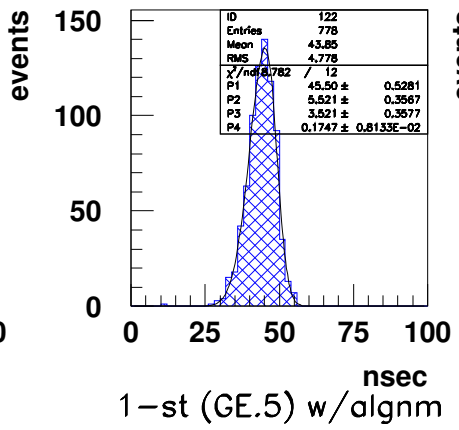
1−st (GE.5) no algnm



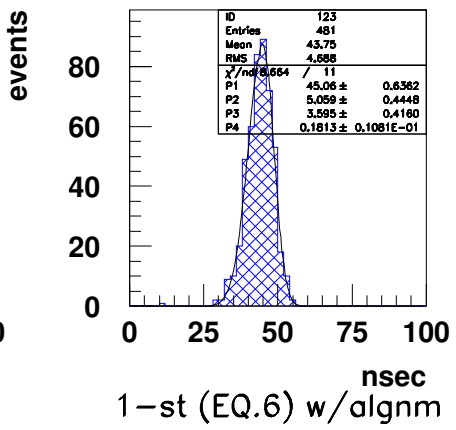
1−st (EQ.6) no algnm



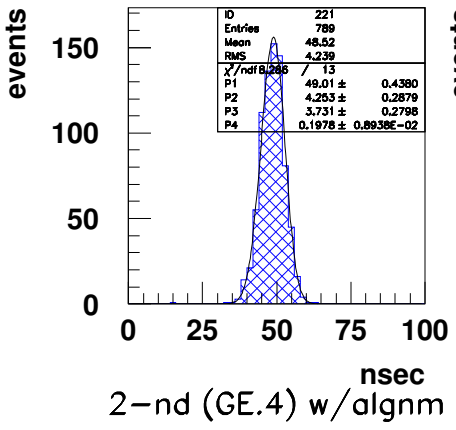
1−st (GE.4) w/algnm



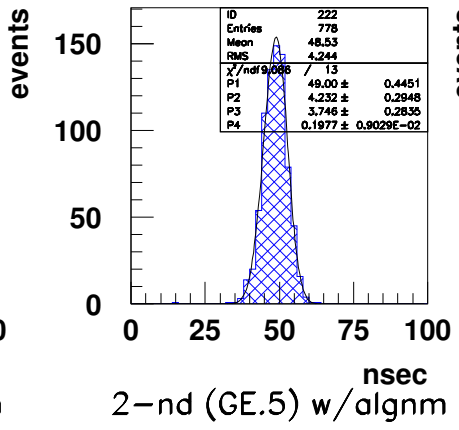
1−st (GE.5) w/algnm



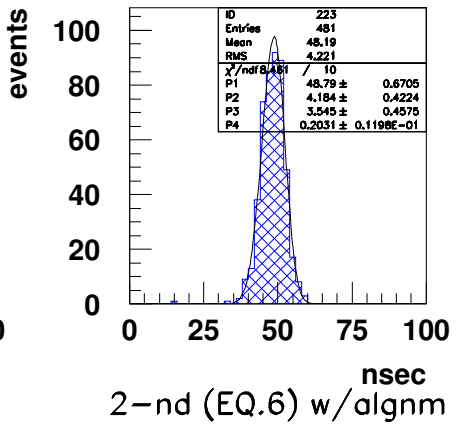
1−st (EQ.6) w/algnm



2−nd (GE.4) w/algnm



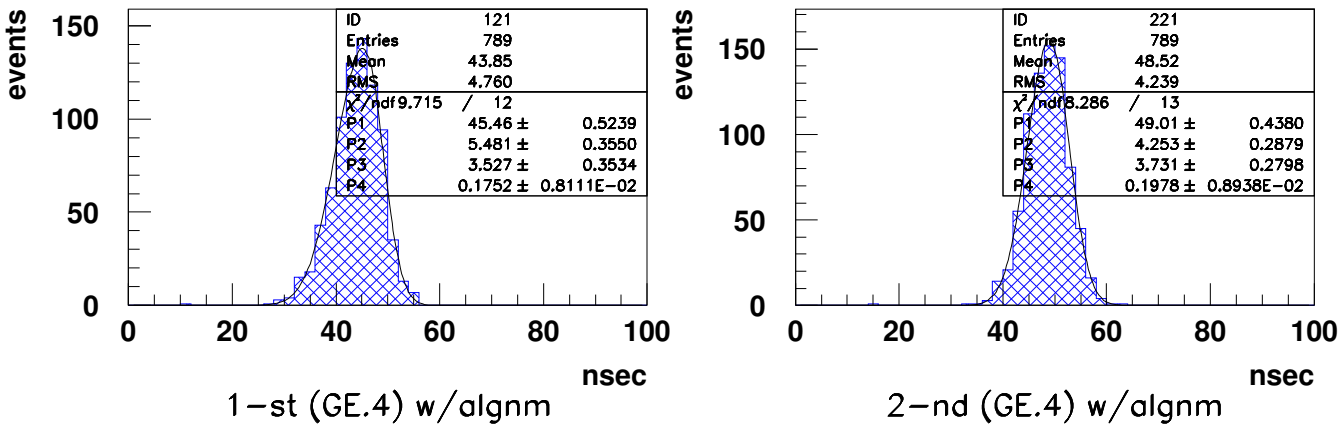
2−nd (GE.5) w/algnm



2−nd (EQ.6) w/algnm

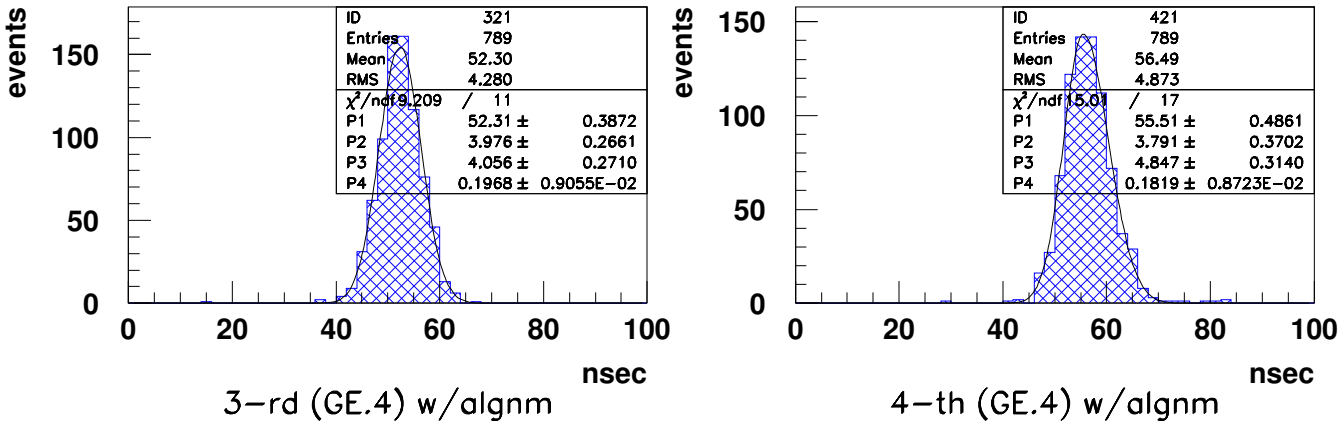
98/11/20 18.19

CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98



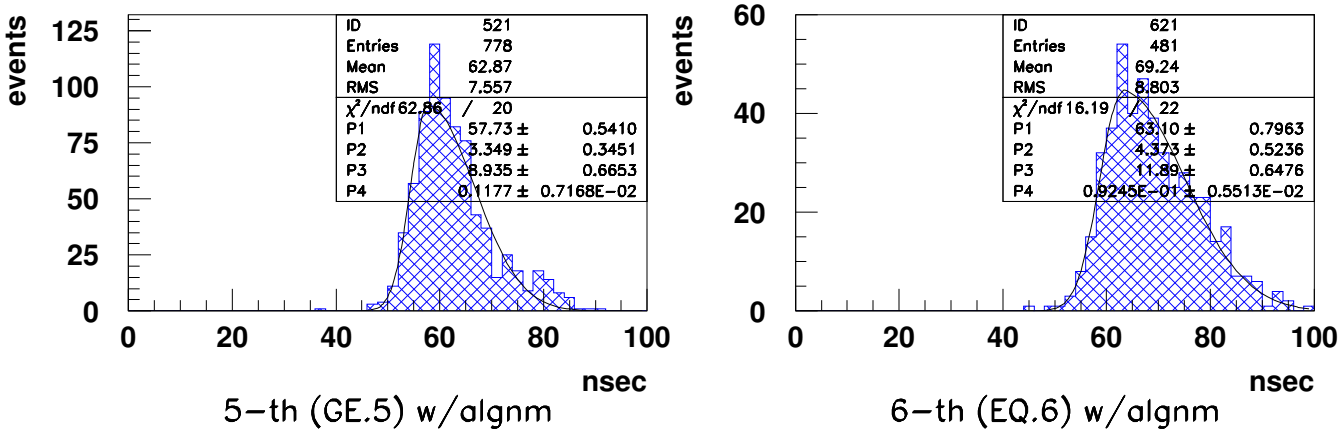
1−st (GE.4) w/algnm

2−nd (GE.4) w/algnm



3−rd (GE.4) w/algnm

4−th (GE.4) w/algnm

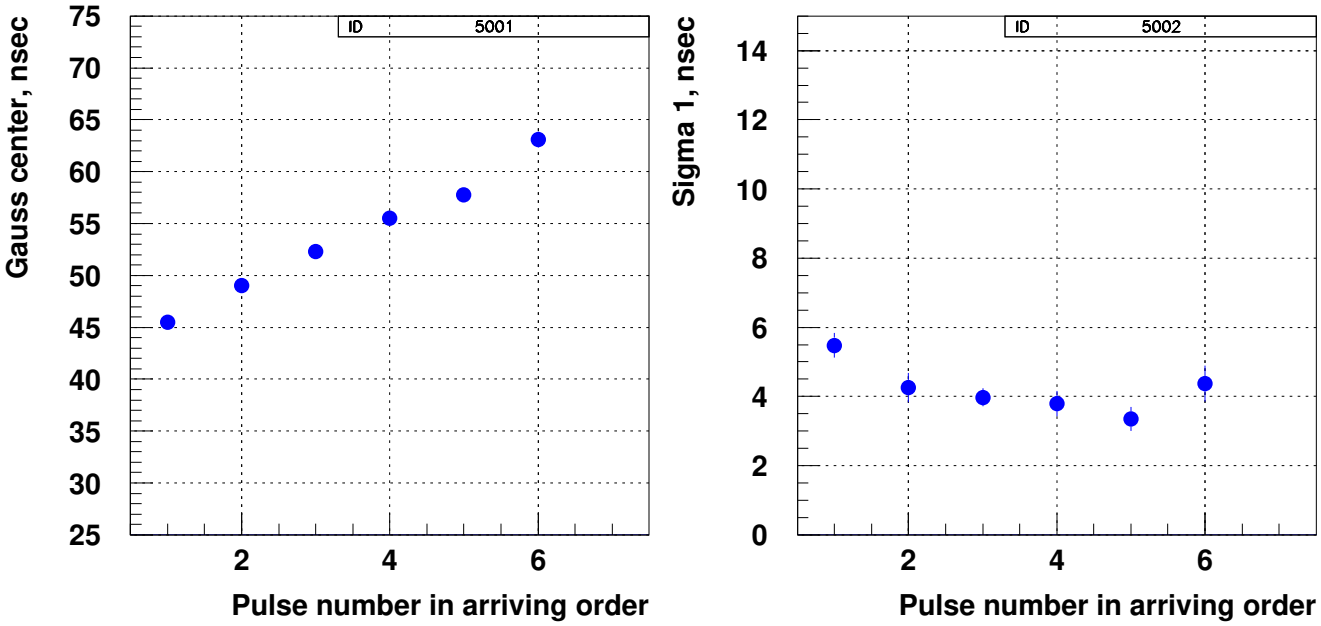


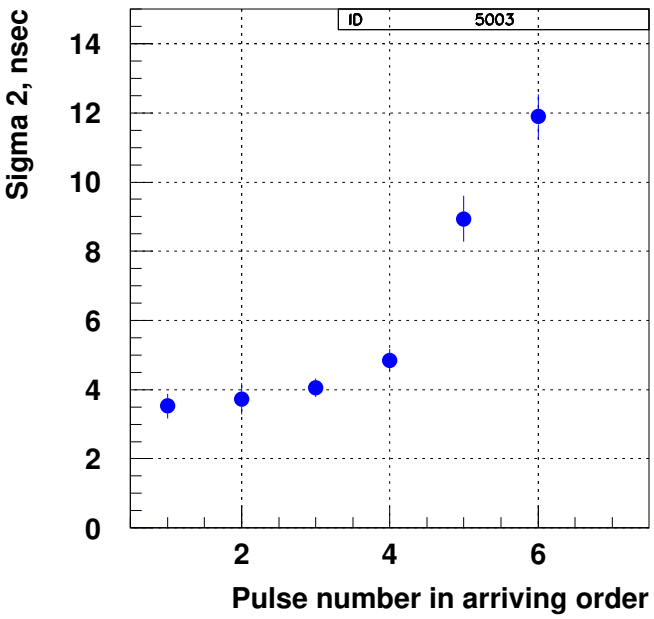
5−th (GE.5) w/algnm

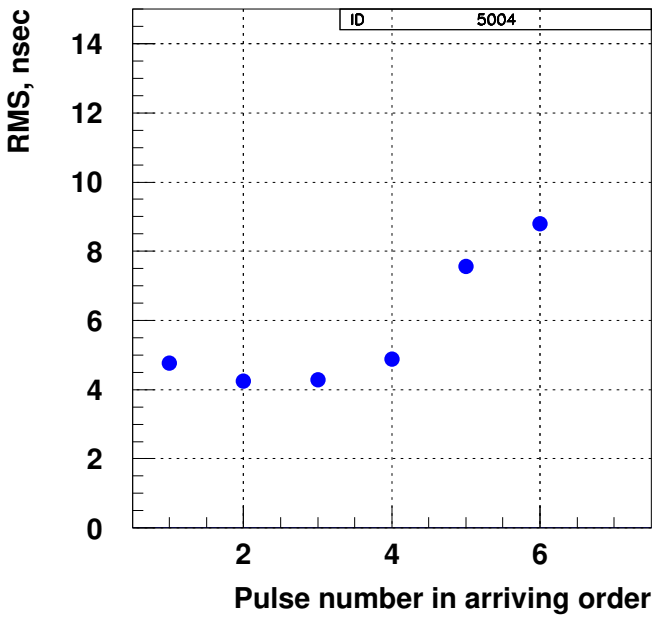
6−th (EQ.6) w/algnm

98/11/20 18.20

CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98

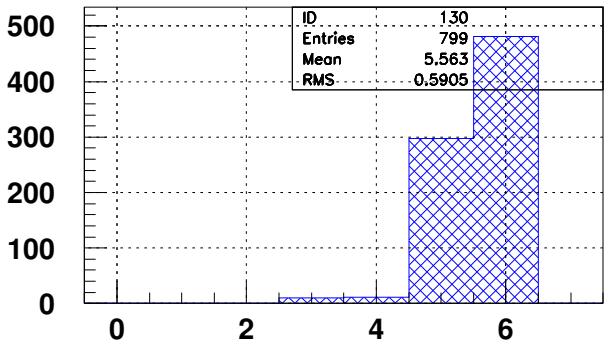




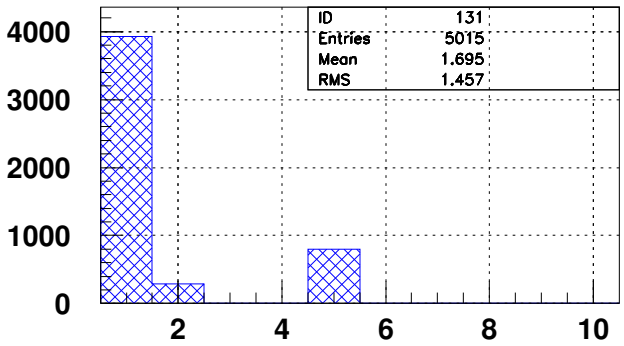


98/11/20 18.20

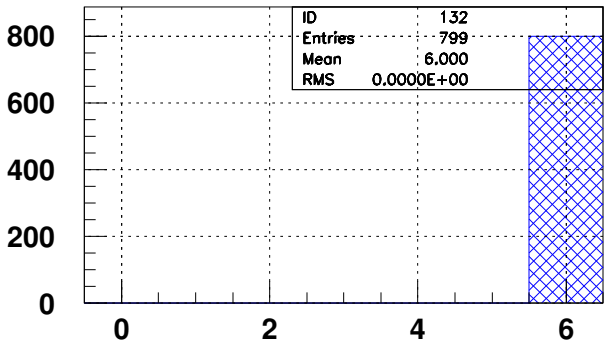
CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98



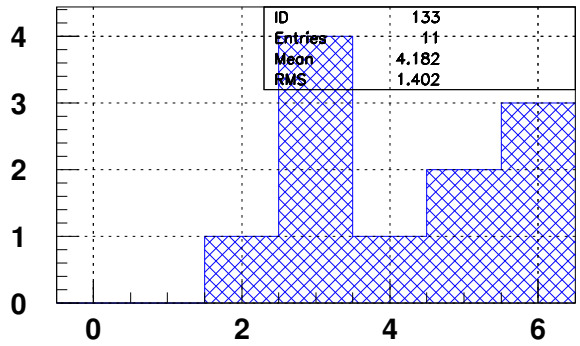
Nmb of planes ON



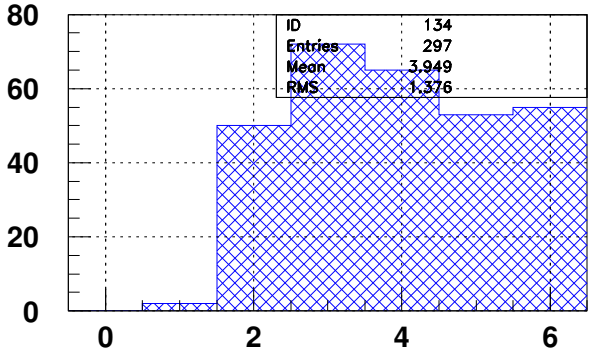
Nmb of surv.events vs cut nmb



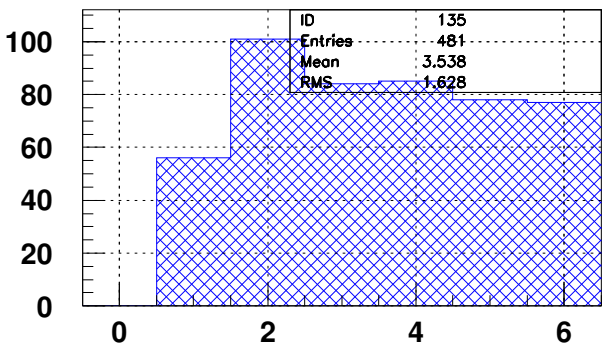
Nmb of pl in track (track thru sel. ch)



First plane number for 4 pl ON

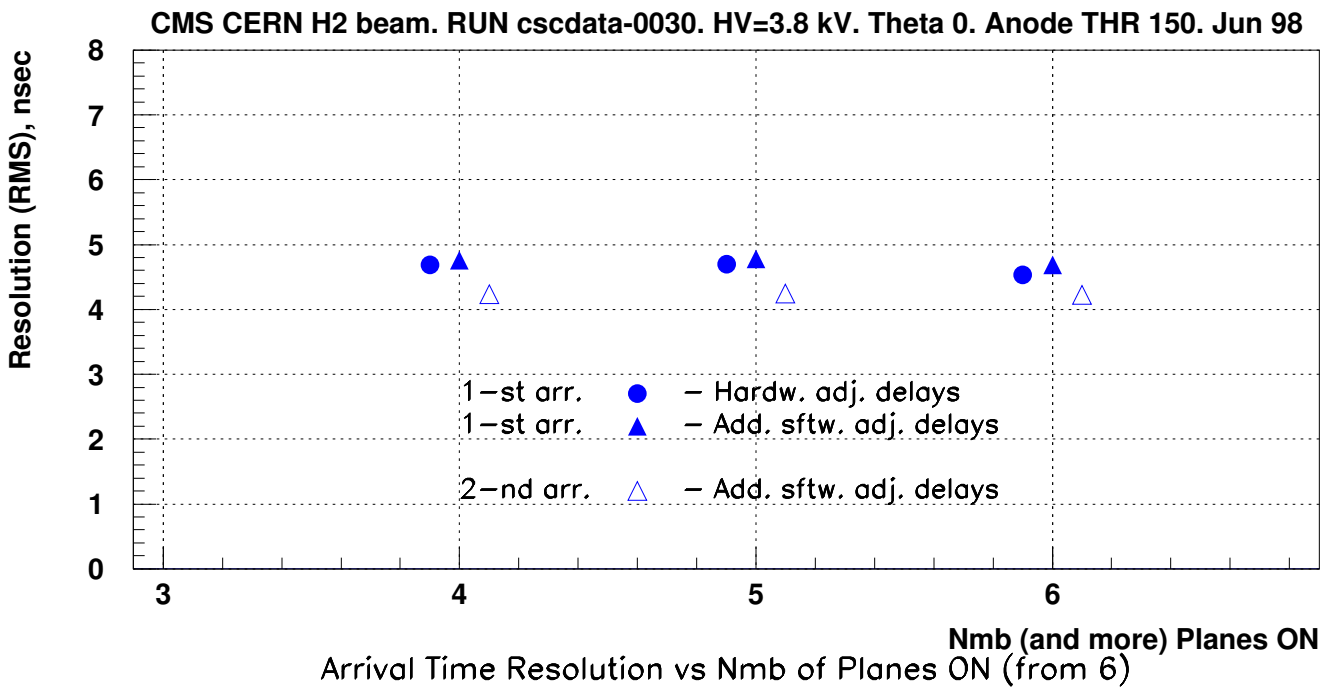


First plane number for 5 pl ON

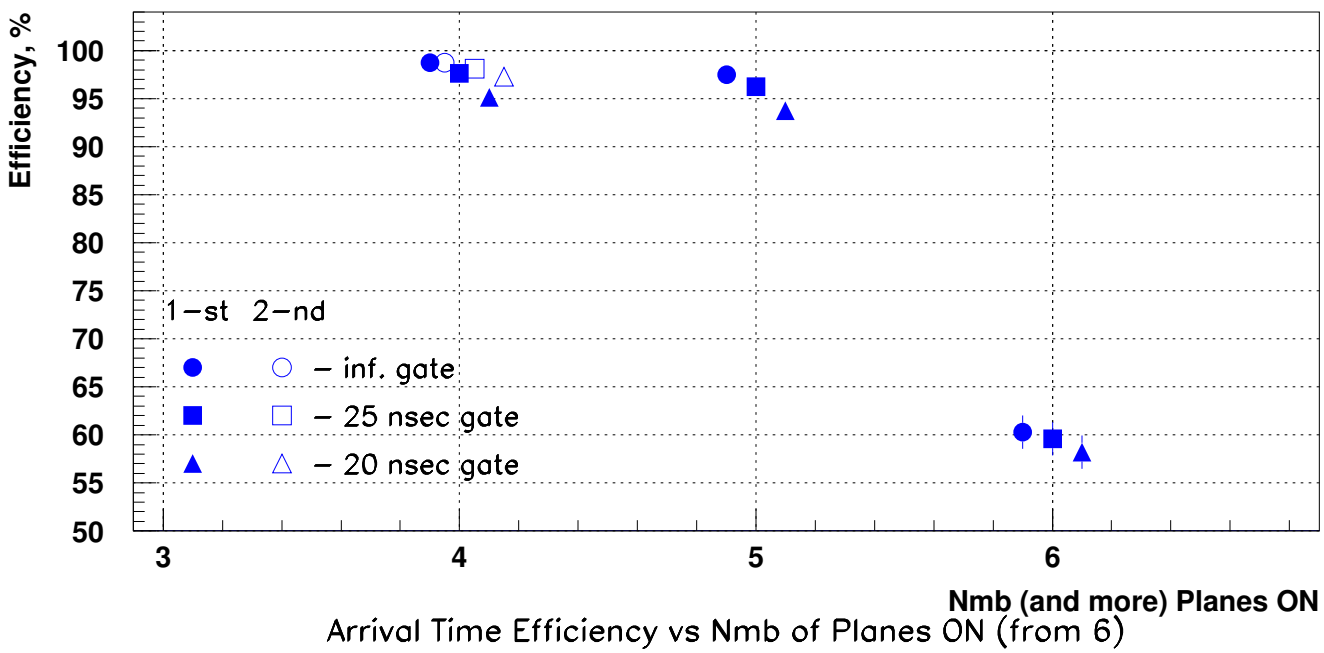


First plane number for 6 pl ON

98/11/20 18.20

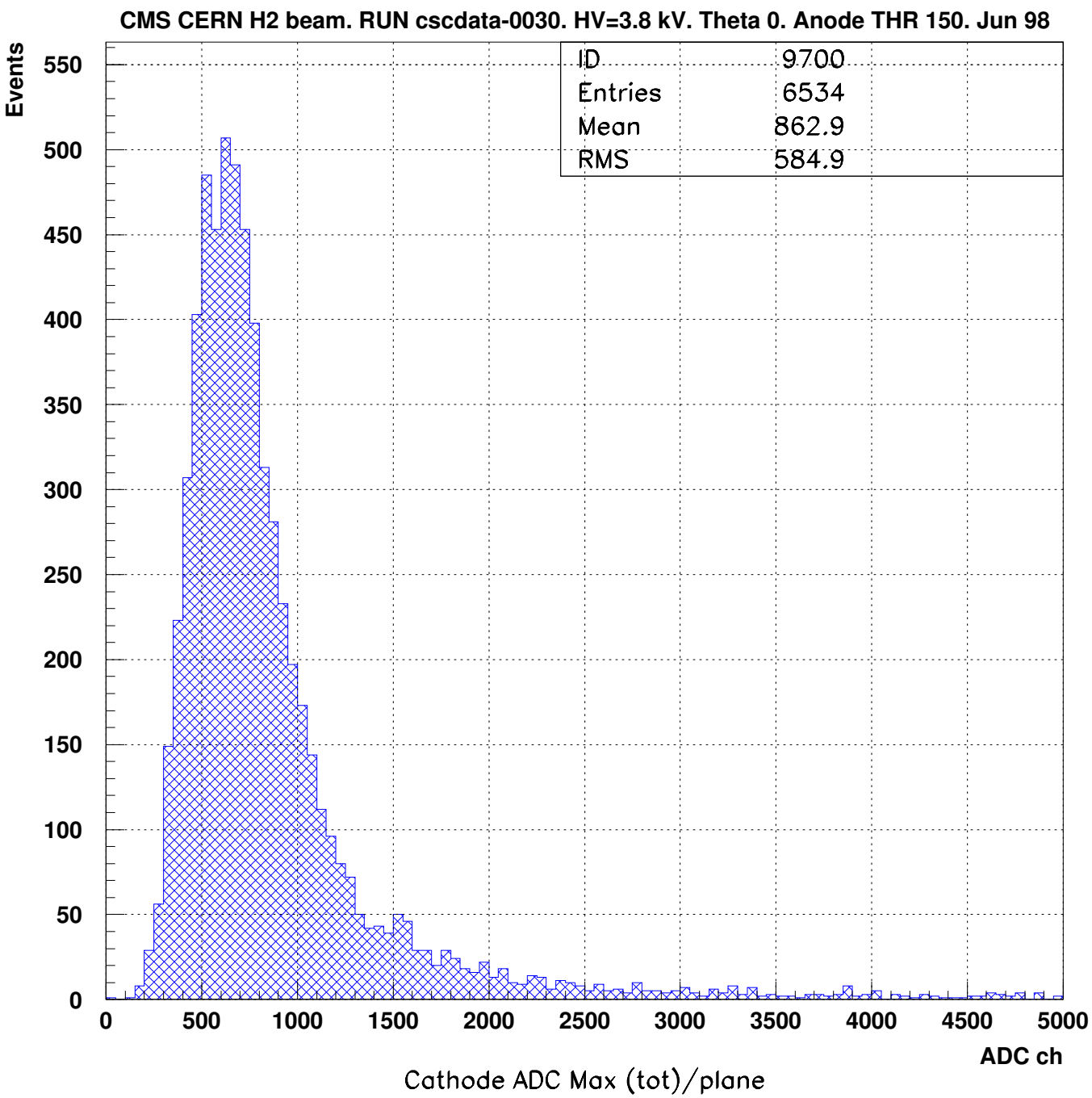


Arrival Time Resolution vs Nmb of Planes ON (from 6)



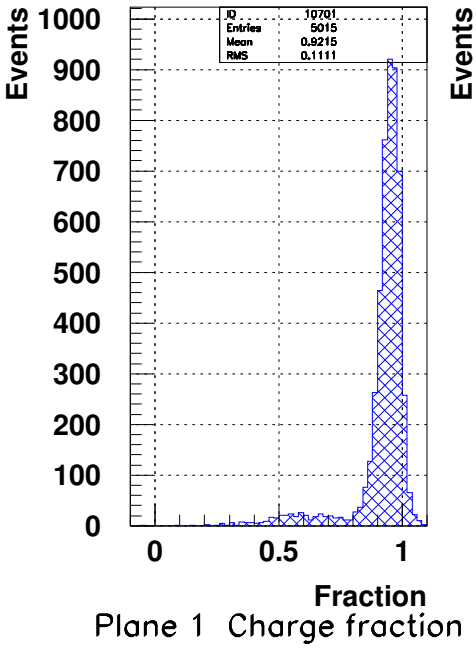
Arrival Time Efficiency vs Nmb of Planes ON (from 6)

98/11/20 18.22

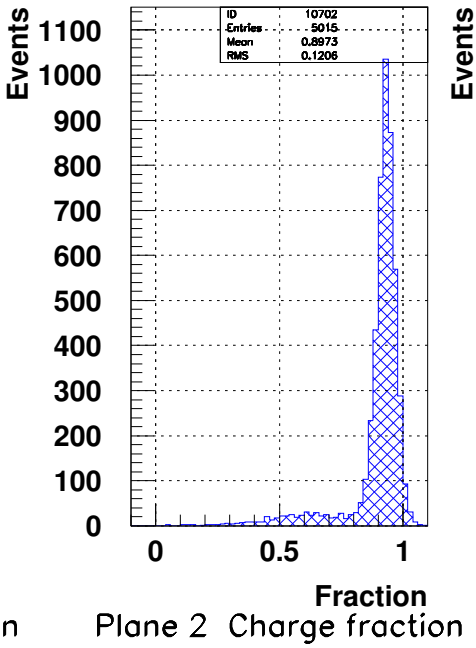

CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98
ID 9700
Entries 6534
Mean 862.9
RMS 584.9
Events
0
50
100
150
200
250
300
350
400
450
500
550
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
ADC ch
Cathode ADC Max (tot)/plane

98/11/20 18.27

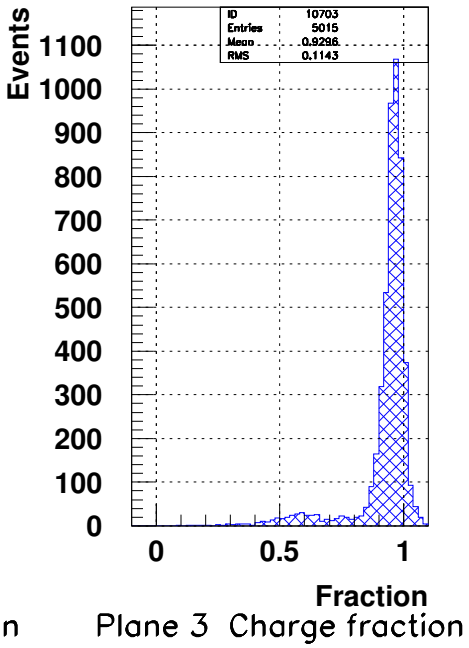
CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98



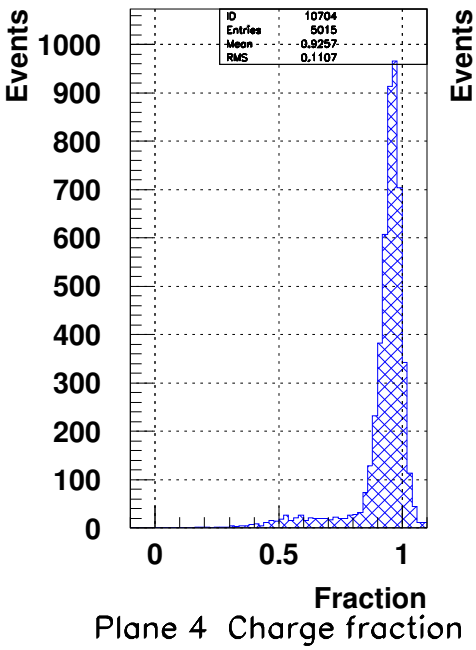
Plane 1 Charge fraction



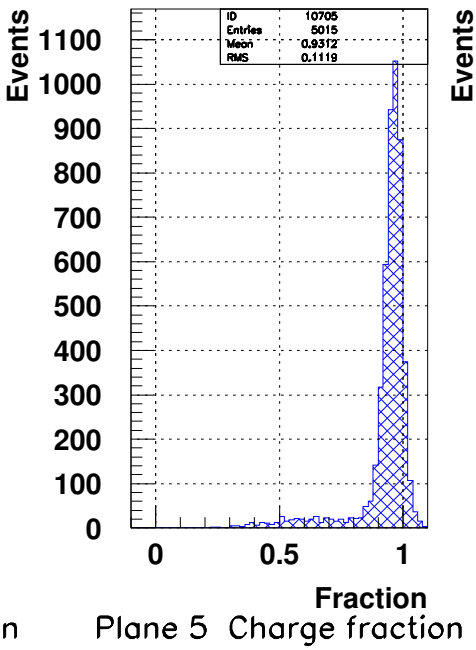
Plane 2 Charge fraction



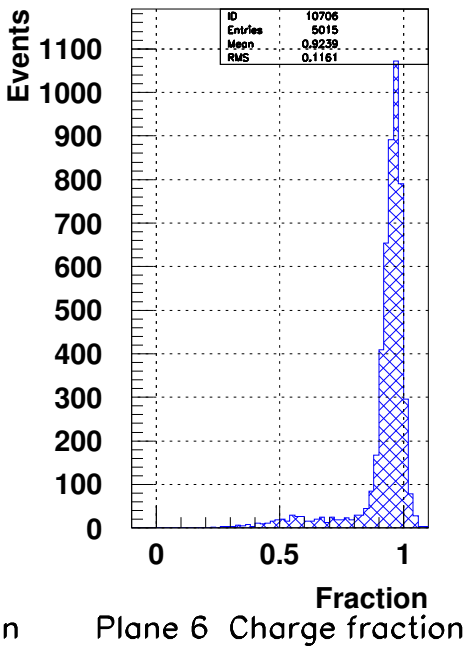
Plane 3 Charge fraction



Plane 4 Charge fraction



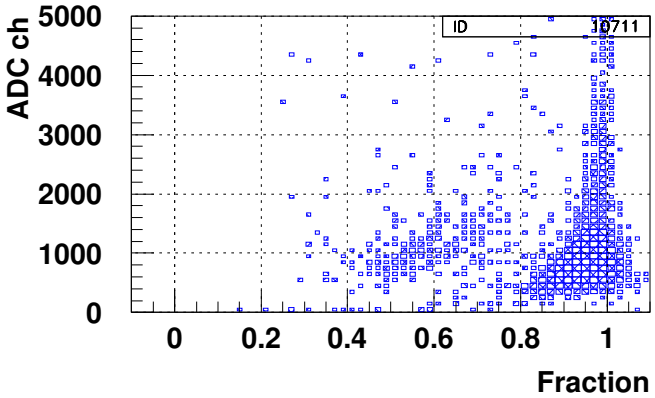
Plane 5 Charge fraction



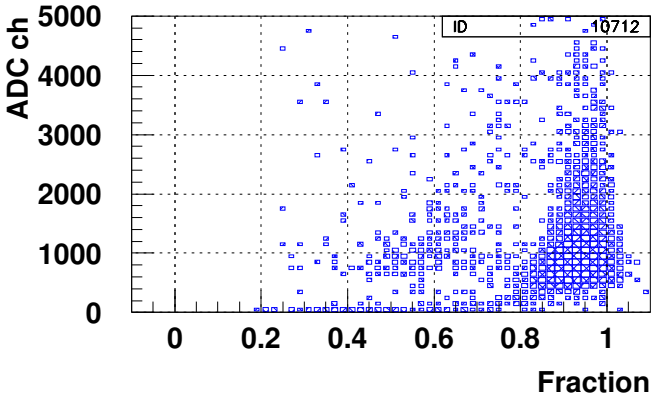
Plane 6 Charge fraction

98/11/20 18.27

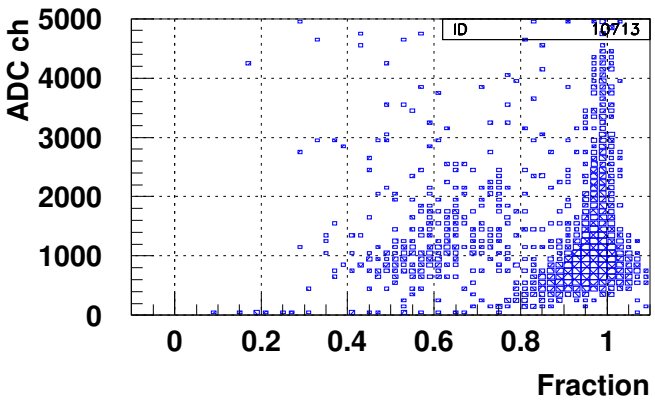
CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98



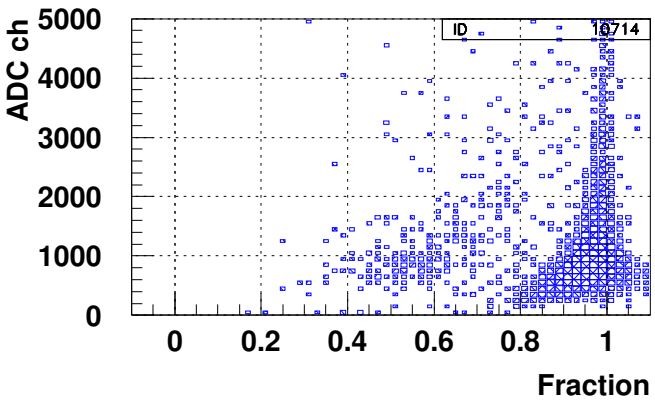
Plane 1 Charge vs chrg fr



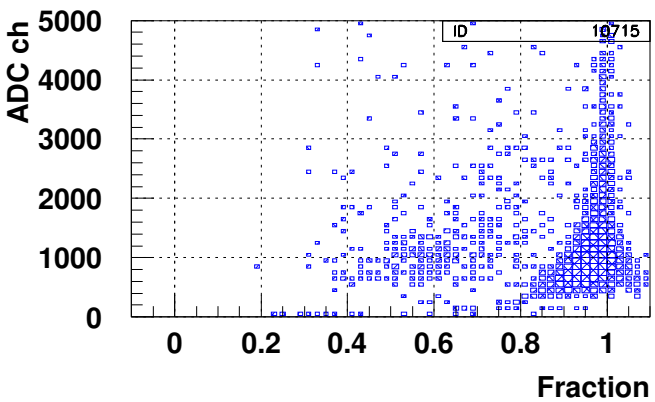
Plane 2 Charge vs chrg fr



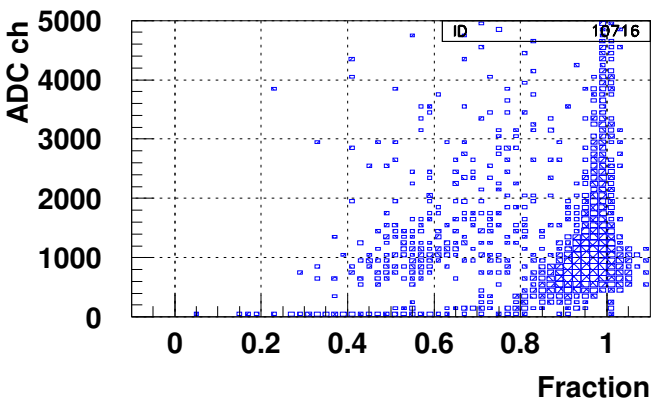
Plane 3 Charge vs chrg fr



Plane 4 Charge vs chrg fr



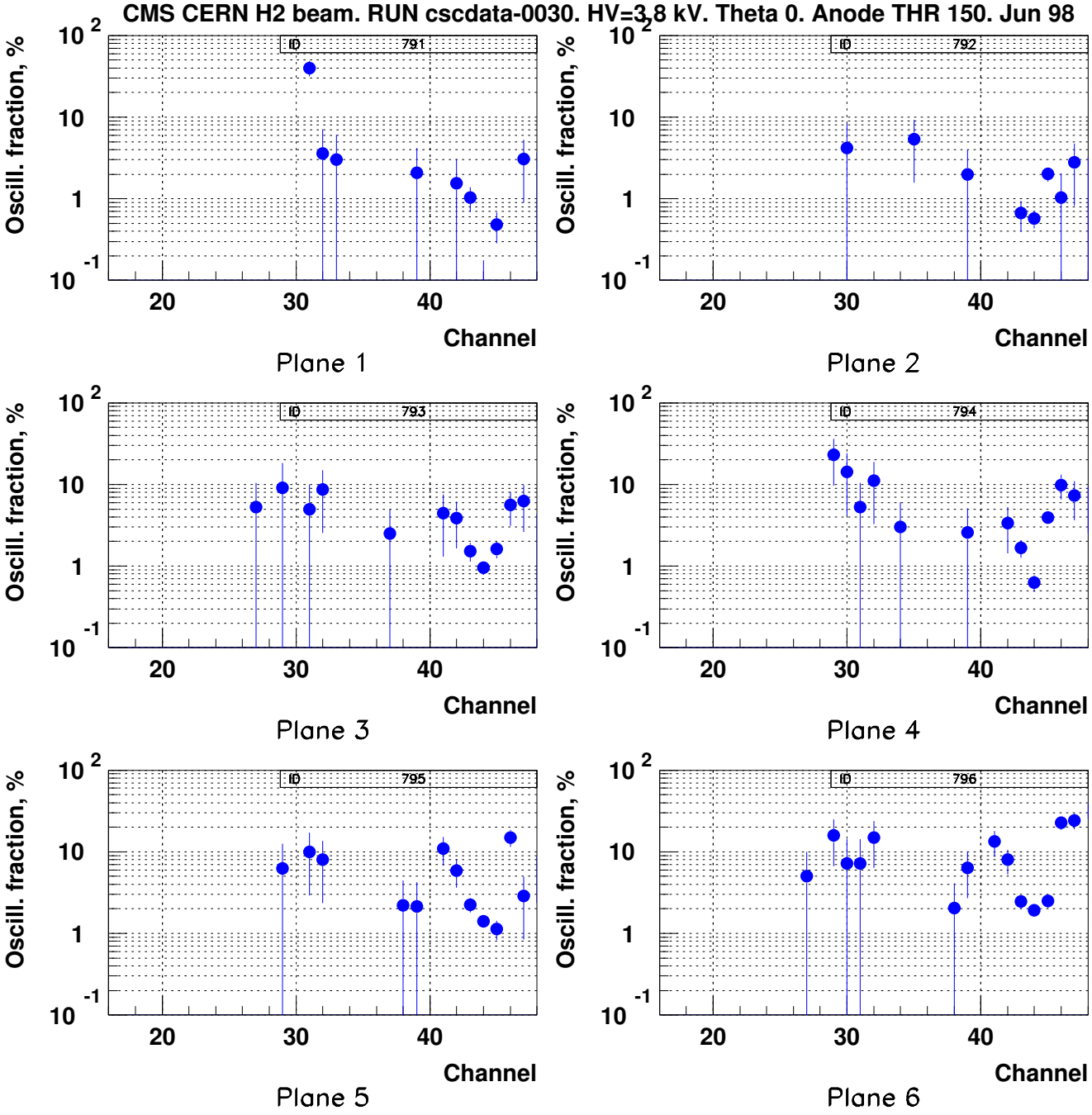
Plane 5 Charge vs chrg fr



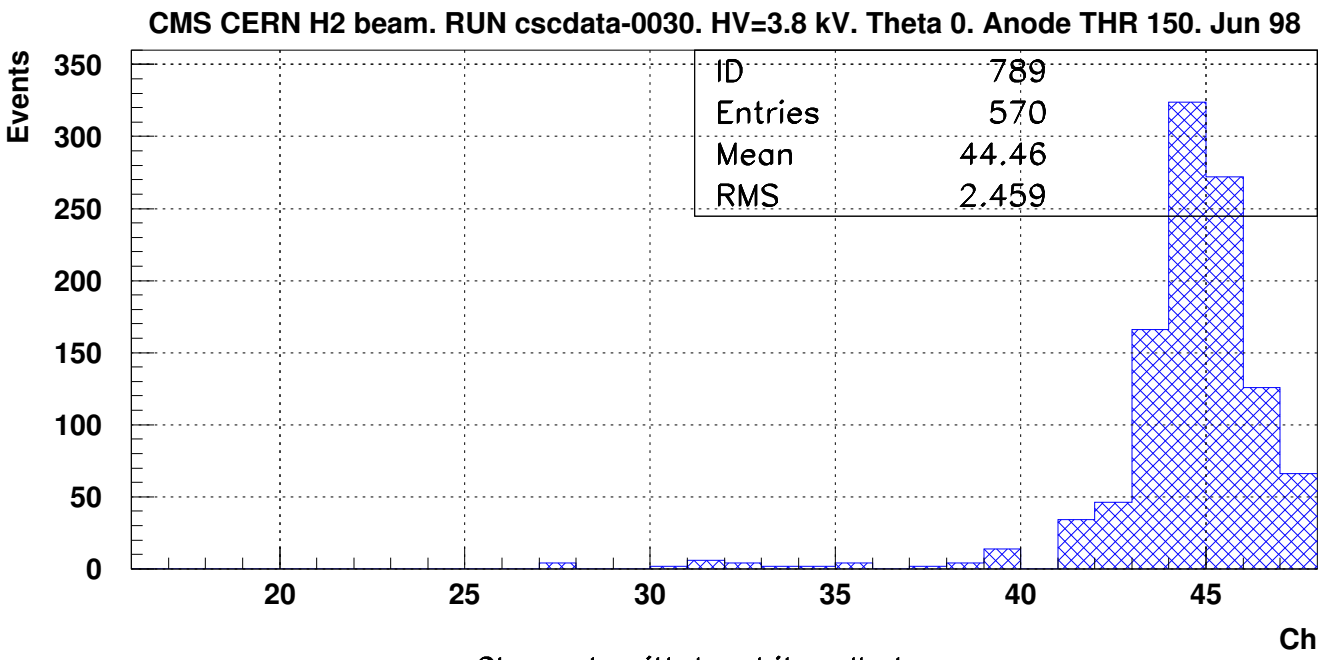
Plane 6 Charge vs chrg fr

98/11/20 18.28

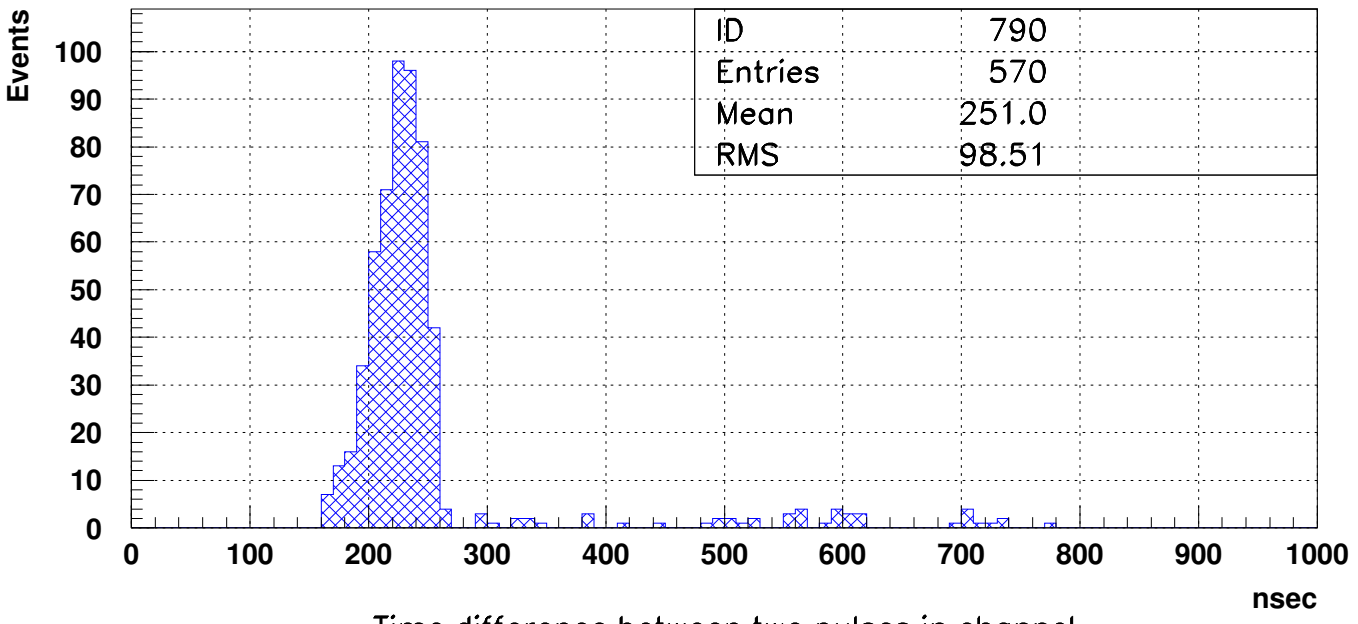
CMS CERN H2 beam. RUN cscdata-0030. HV=3.8 kV. Theta 0. Anode THR 150. Jun 98



98/11/20 18.29



Channels with two hits, all planes



Time difference between two pulses in channel