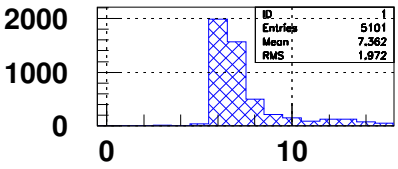
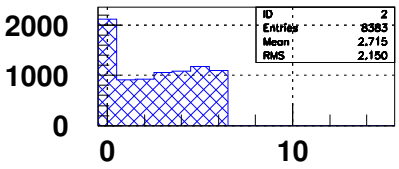
98/11/20 17.14

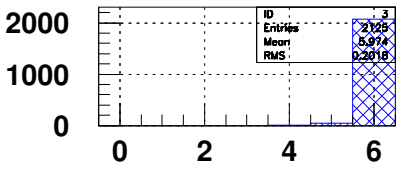
CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98



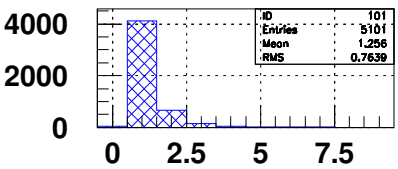
Anode hits, total



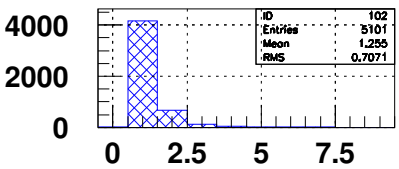
Event multiplicity type



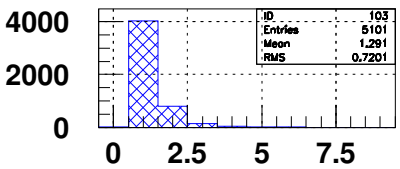
Nmb of planes with mult=1



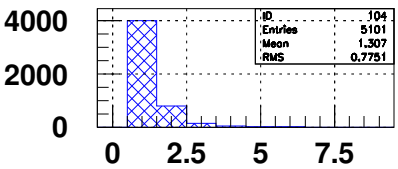
Nhits Pl 1



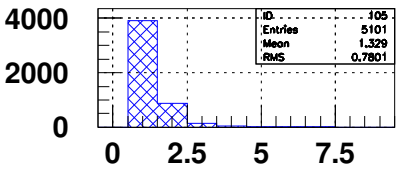
Nhits Pl 2



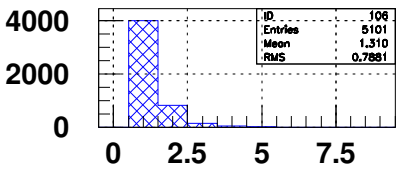
Nhits Pl 3



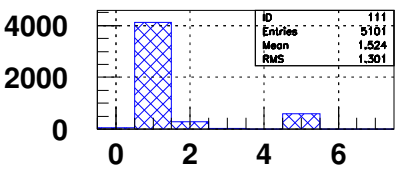
Nhits Pl 4



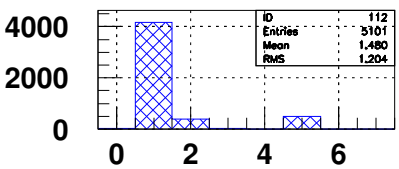
Nhits Pl 5



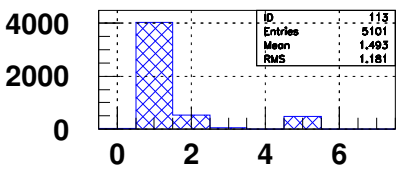
Nhits Pl 6



Mlt Pl 1



Mlt Pl 2



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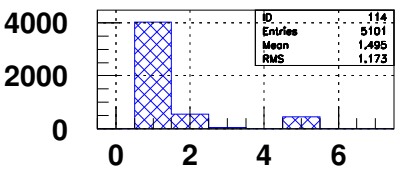
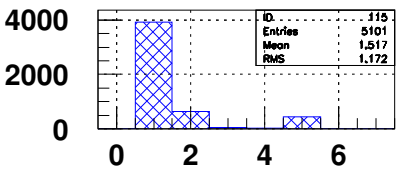
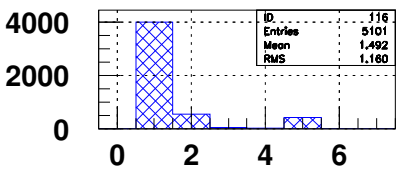


Mlt Pl 4



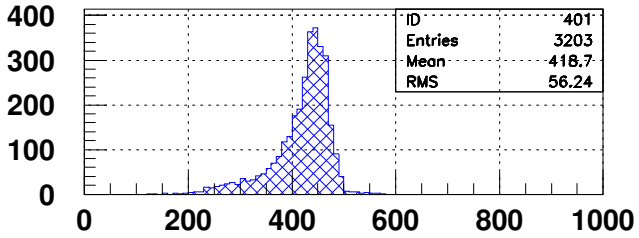
Mlt Pl 5



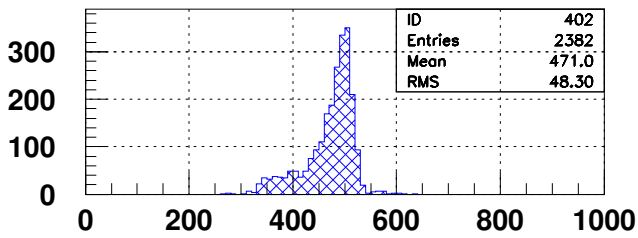
Mlt Pl 6

98/11/20 17.14

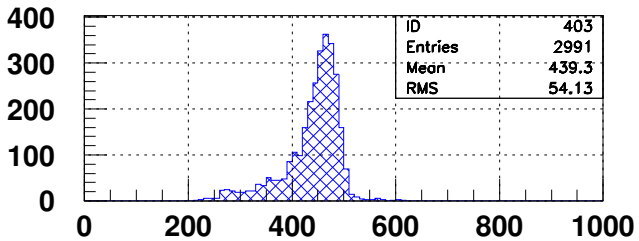
CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98



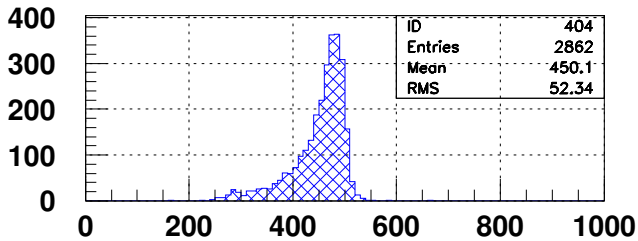
bc1−lead (L+R), ch



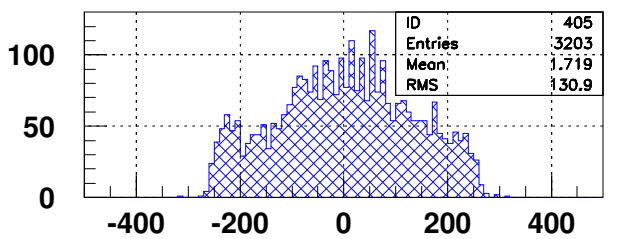
bc1−lead (U+D), ch



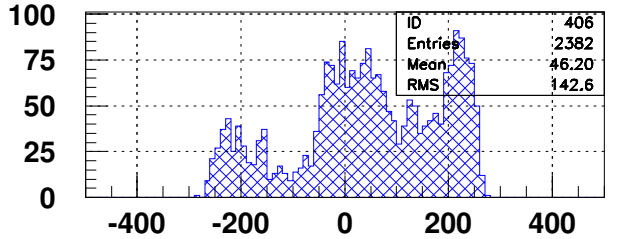
bc2−lead (L+R), ch



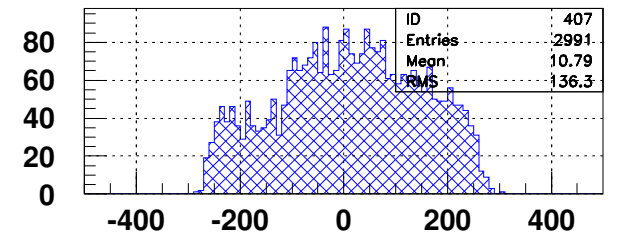
bc2−lead (U+D), ch



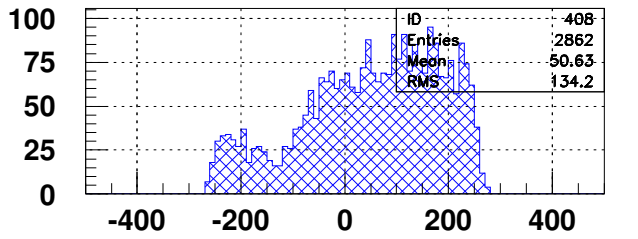
bc1−lead (L−R), ch



bc1−lead (U−D), ch



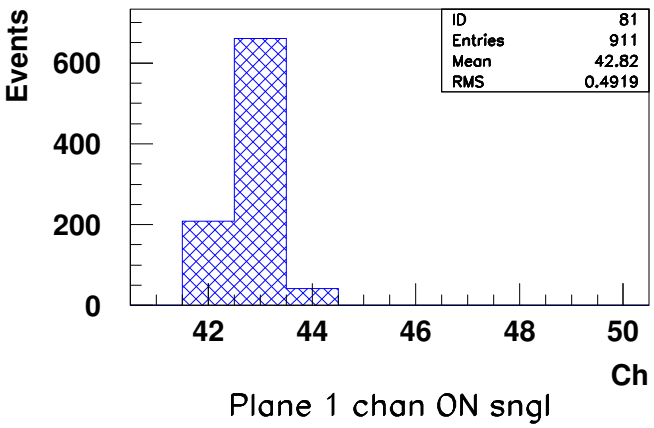
bc2−lead (L−R), ch

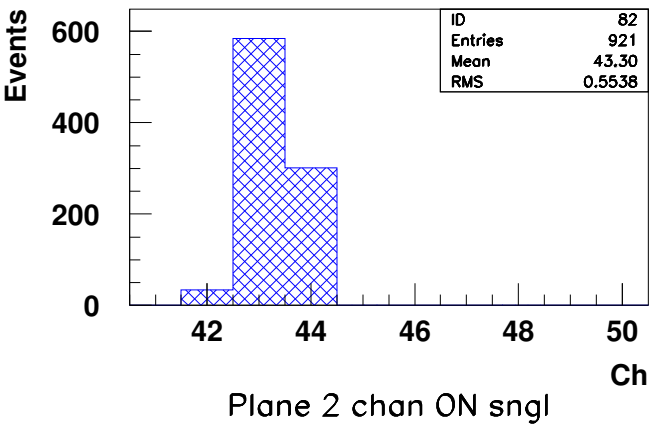


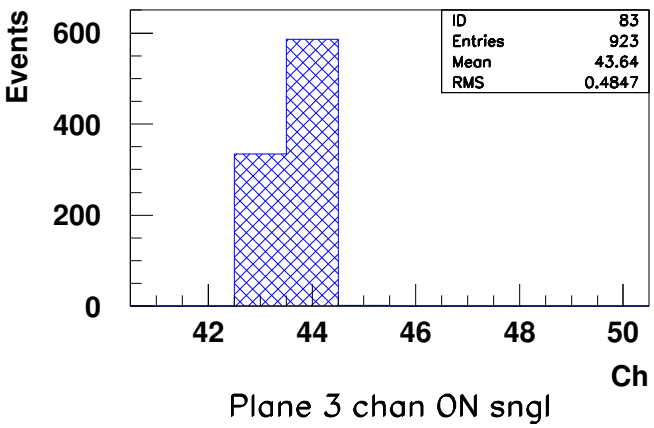
bc2−lead (U−D), ch

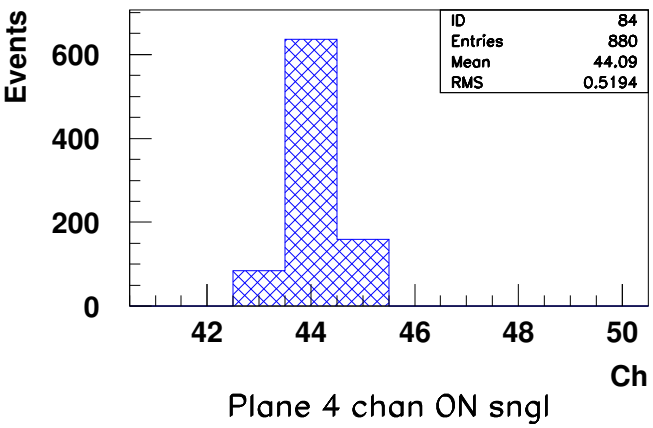
98/11/20 17.14

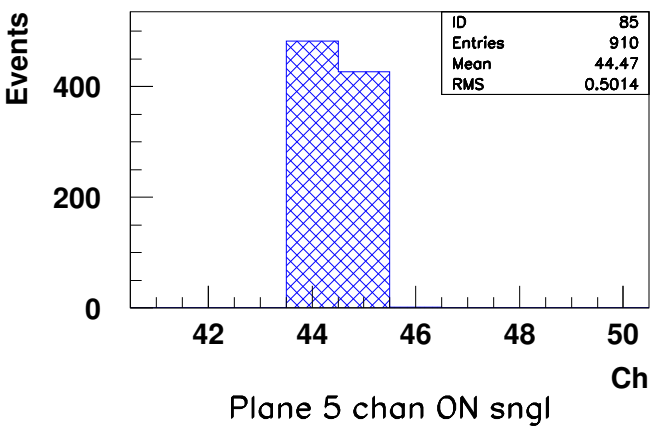
CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98

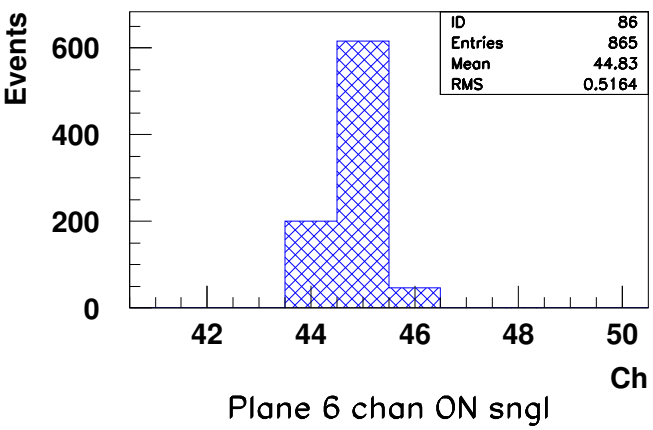






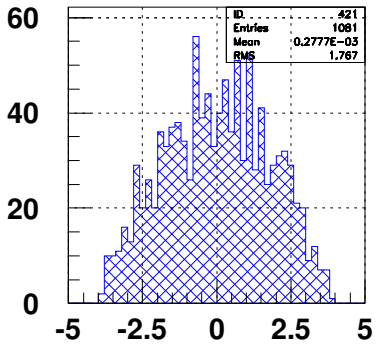




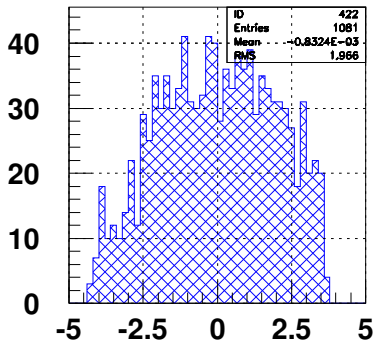


98/11/20 17.14

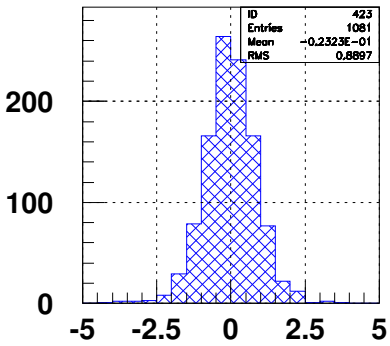
CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98



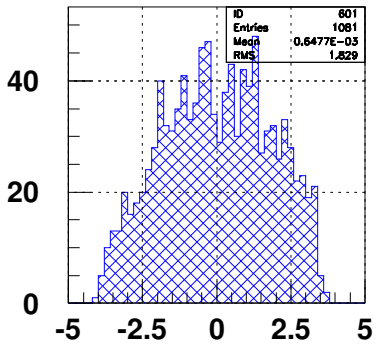
X1 – avx(1) cm



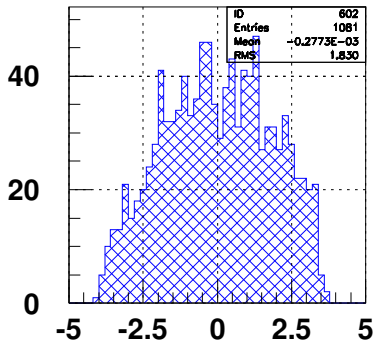
X2 – avx(2) cm



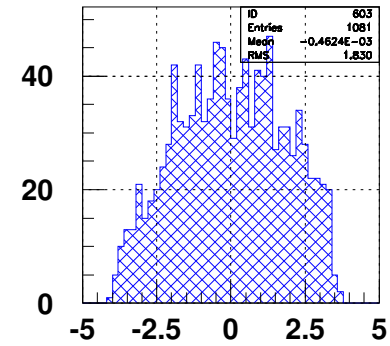
THETX mrad



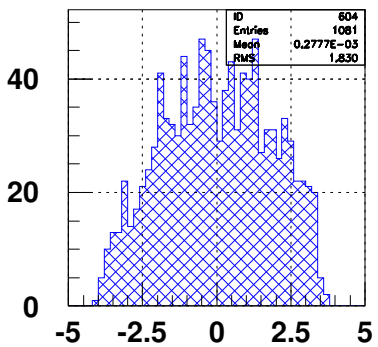
Xp Plane 1



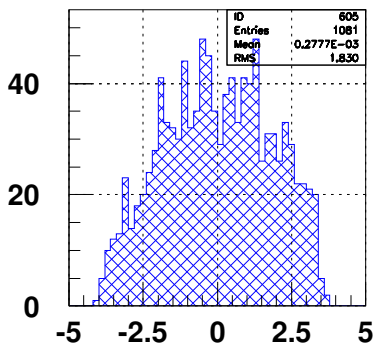
Xp Plane 2



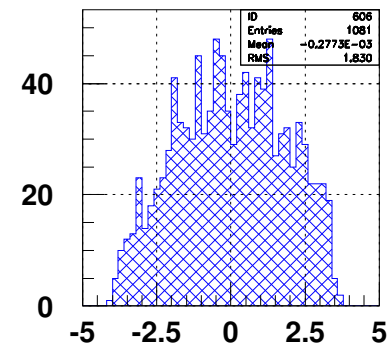
Xp Plane 3



Xp Plane 4



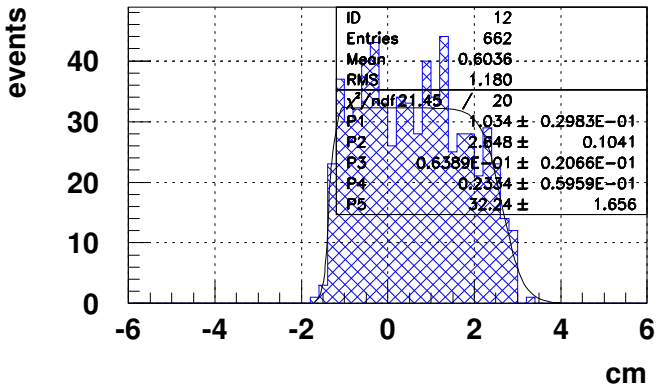
Xp Plane 5



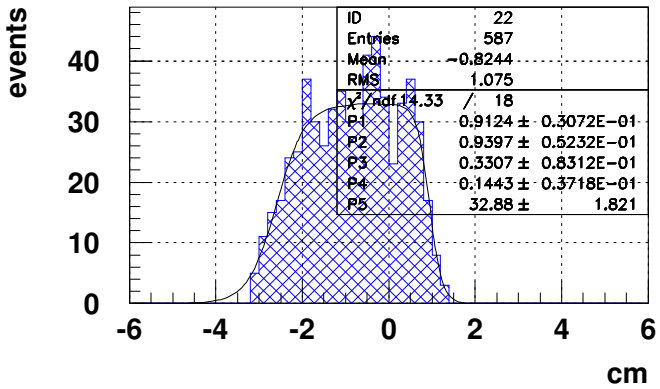
Xp Plane 6

98/11/20 17.15

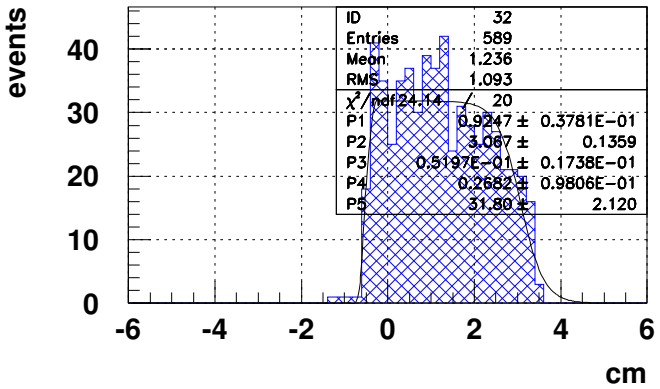
CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98



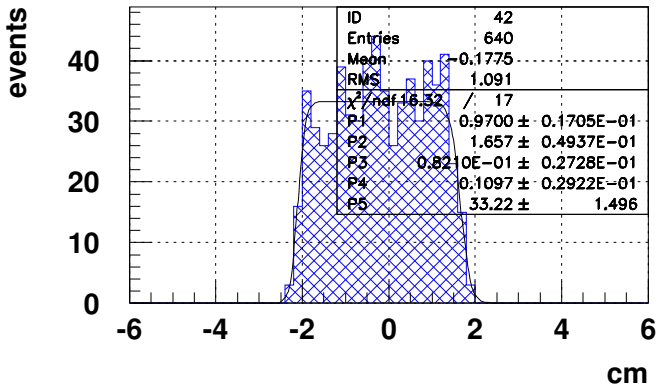
Xpr pl 1 ch 43 ON sng



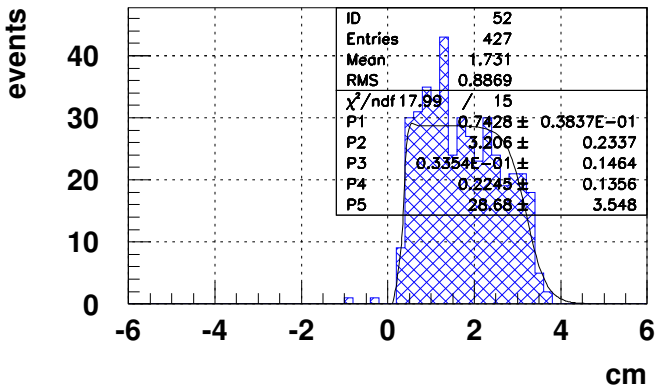
Xpr pl 2 ch 43 ON sng



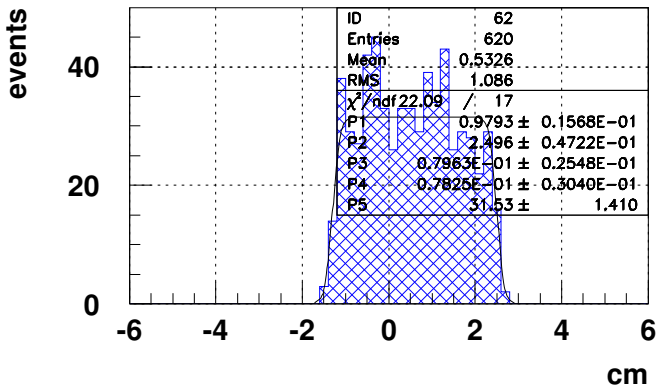
Xpr pl 3 ch 44 ON sng



Xpr pl 4 ch 44 ON sng



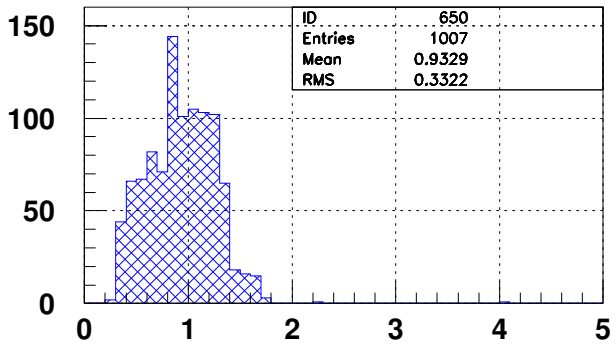
Xpr pl 5 ch 45 ON sng



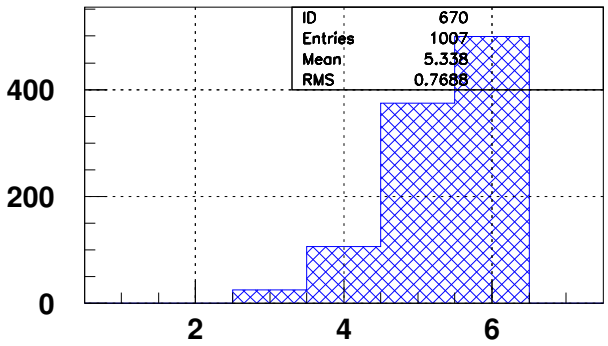
Xpr pl 6 ch 45 ON sng

98/11/20 17.15

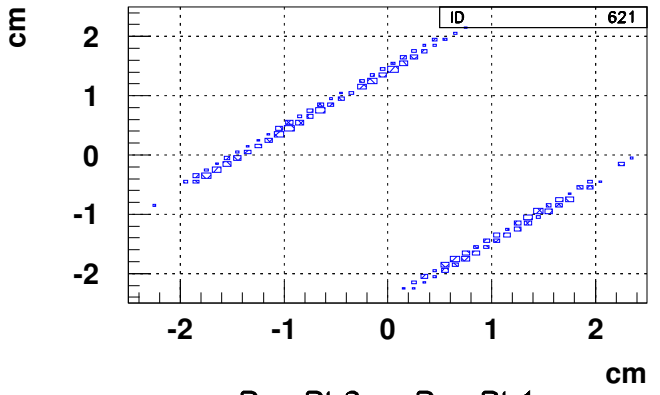
CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98



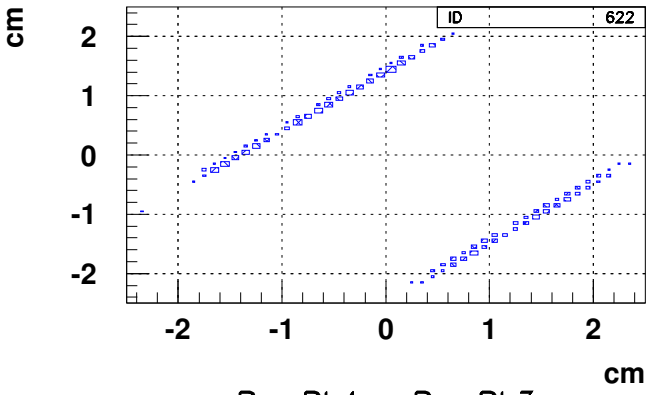
Chi2/NDF



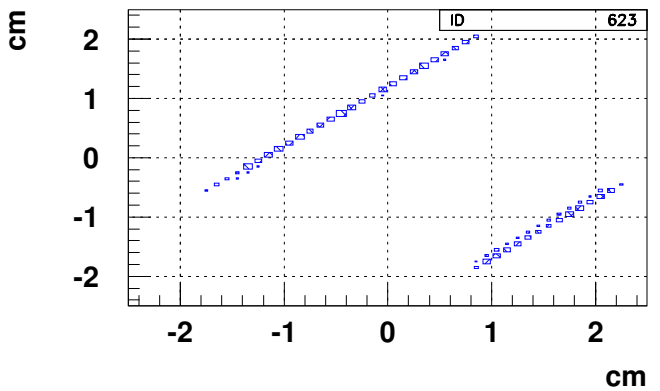
Nmb of anode layers in the fit



Res Pl 2 vs Res Pl 1



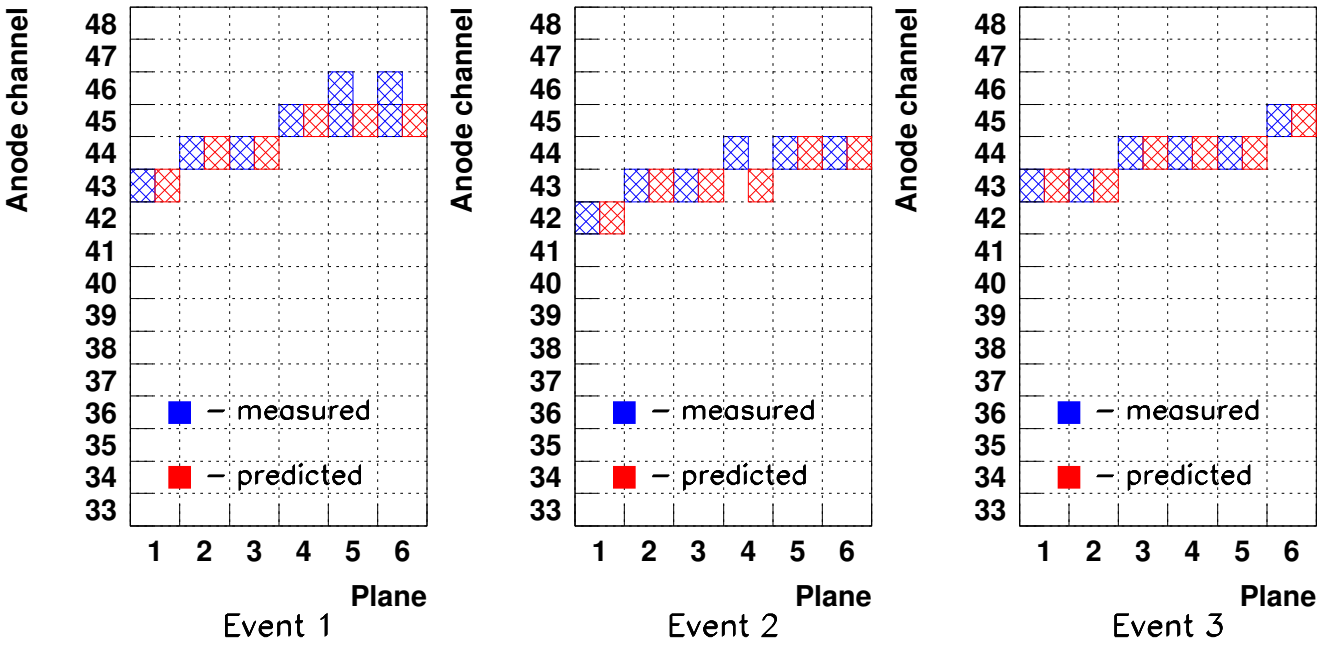
Res Pl 4 vs Res Pl 3



Res Pl 6 vs Res Pl 5

98/11/20 17.16

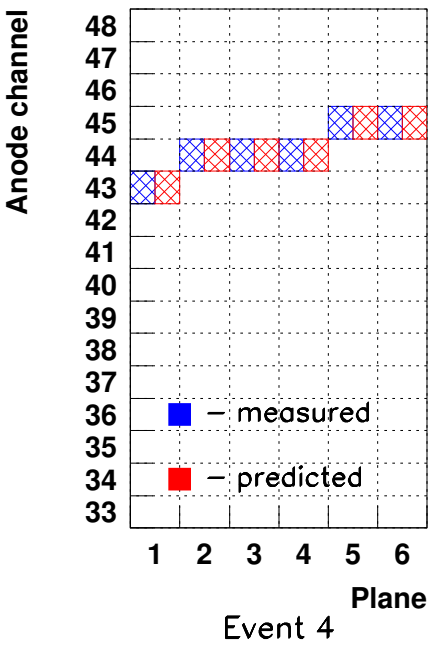
CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98



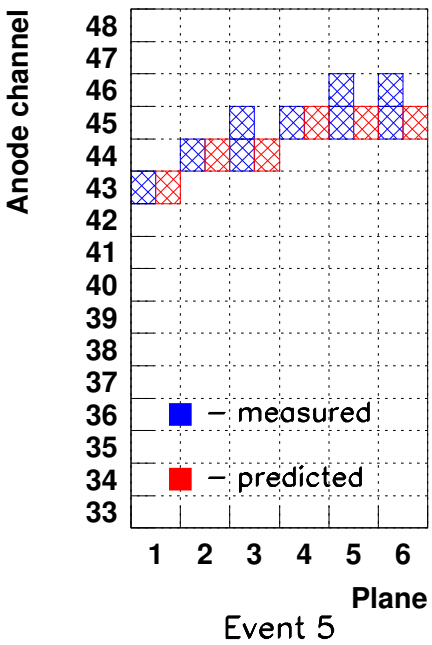
Event 1

Event 2

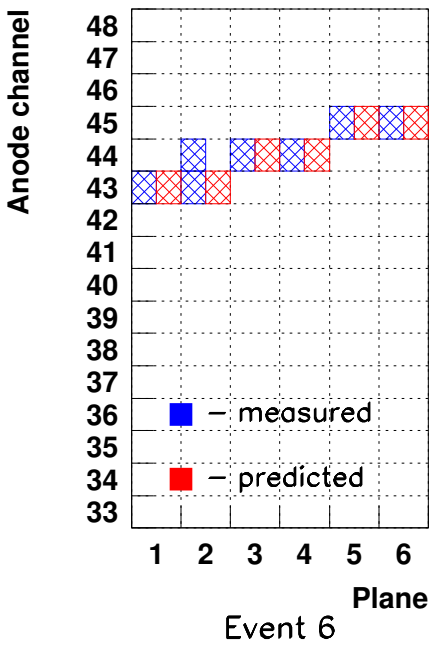
Event 3



Event 4



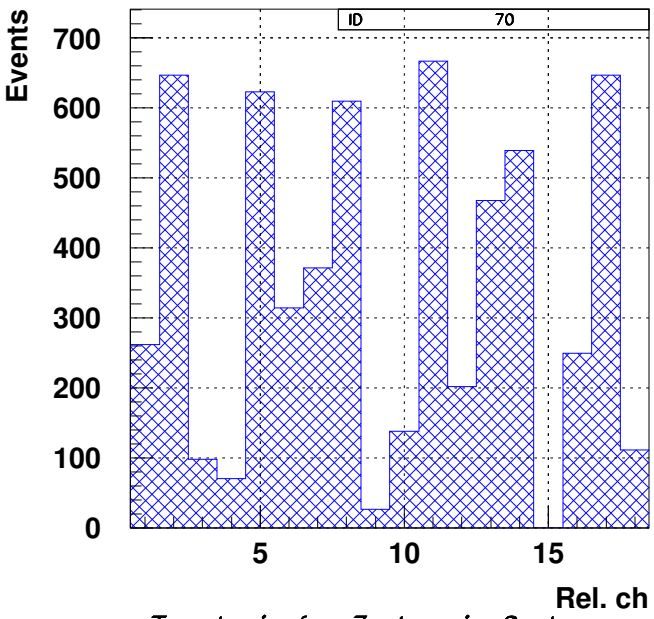
Event 5



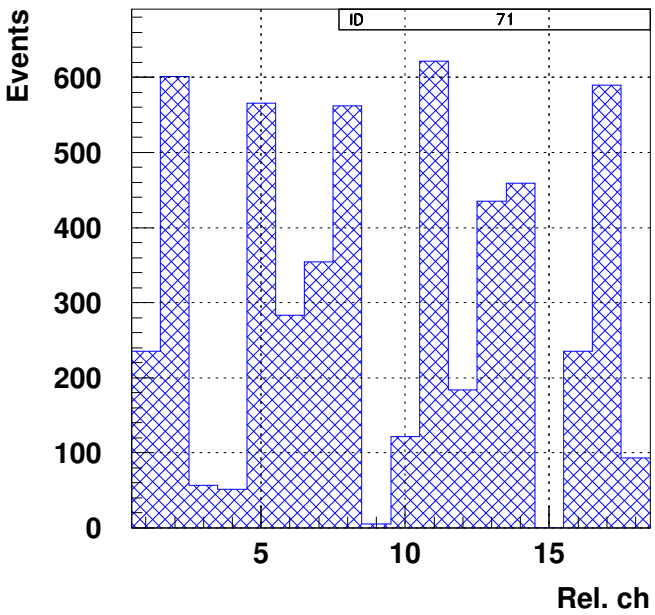
Event 6

98/11/20 17.20

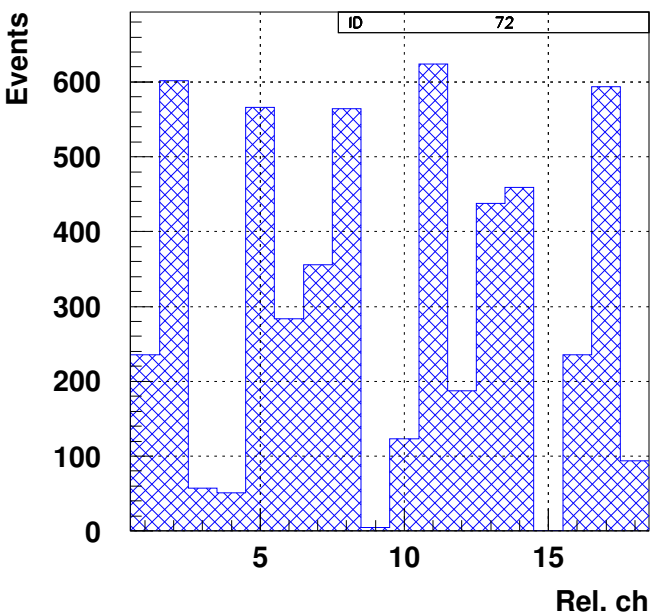
CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98



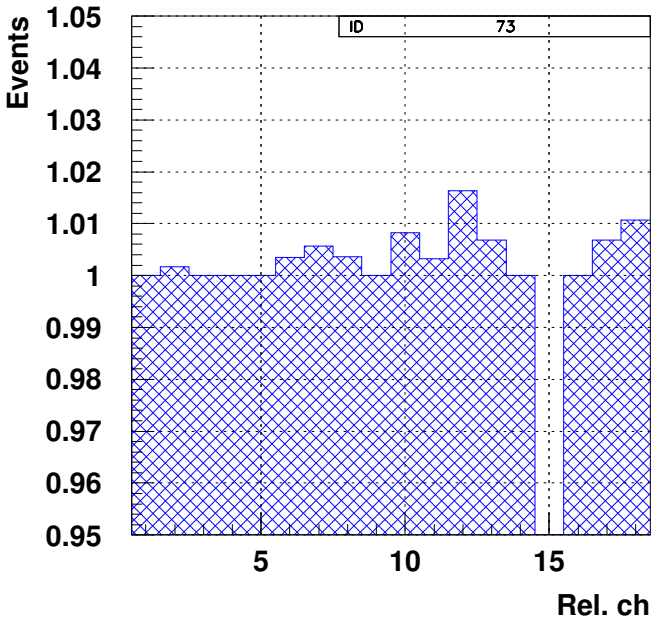
Tracks in for 3 chan in 6 planes



Channels ON

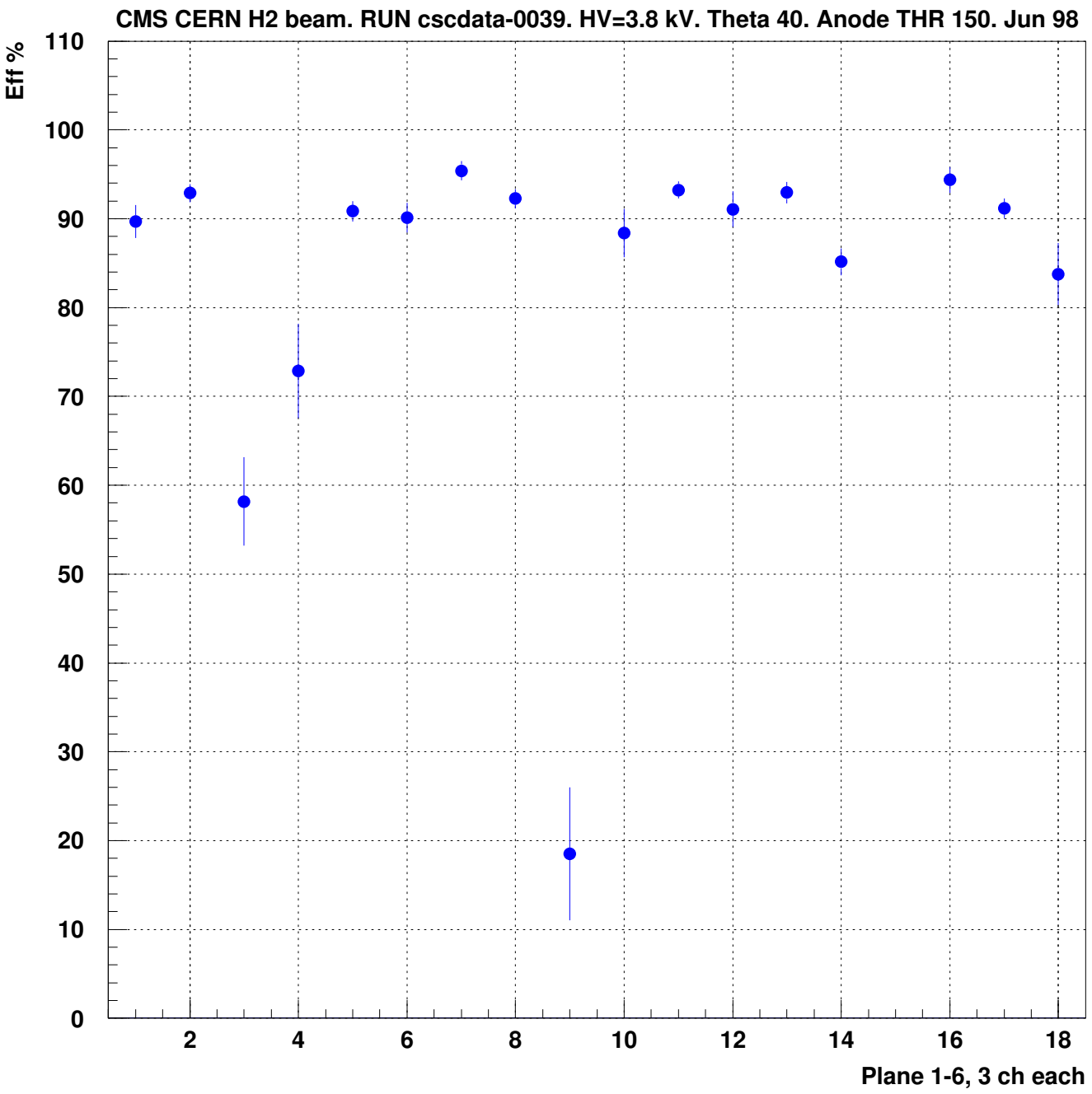


Channels mltplc



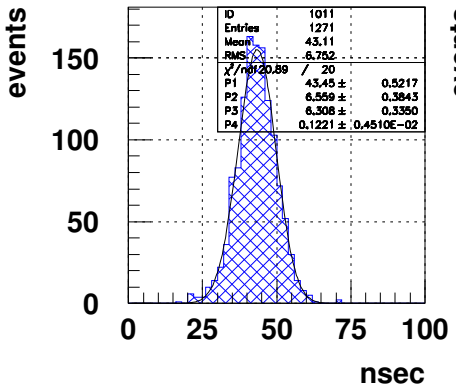
Channels mltplc

98/11/20 17.21

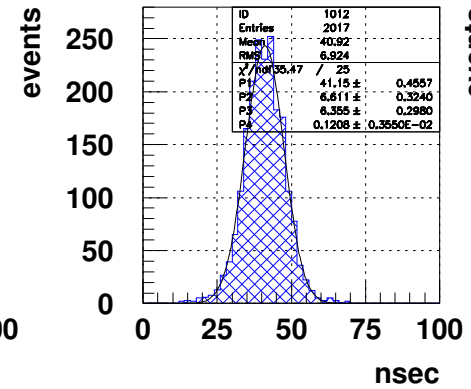

CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98
Eff %
110
100
90
80
70
60
50
40
30
20
10
0
2
4
6
8
10
12
14
16
18
Plane 1-6, 3 ch each

98/11/20 17.21

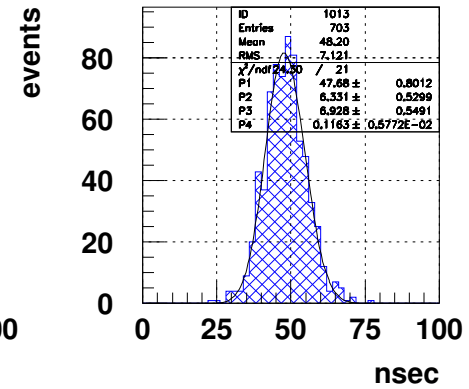
CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98



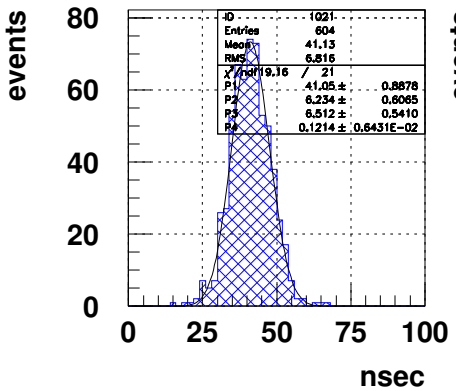
Time PI 1 ch 42



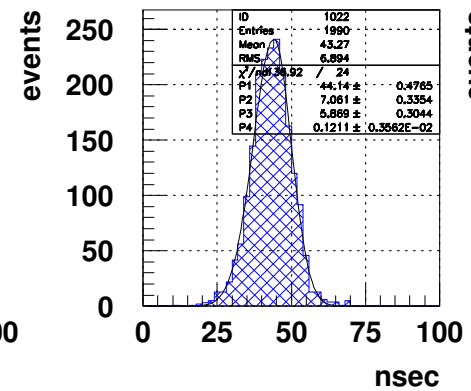
Time PI 1 ch 43



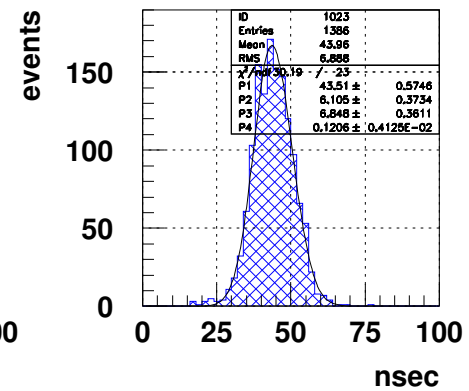
Time PI 1 ch 44



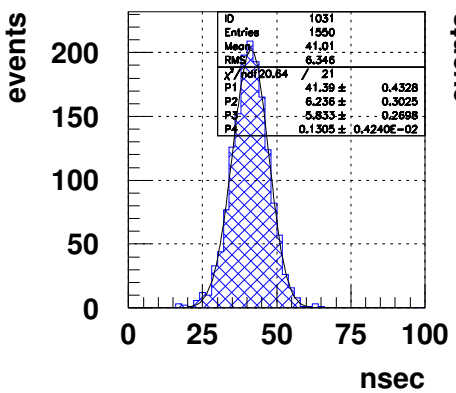
Time PI 2 ch 42



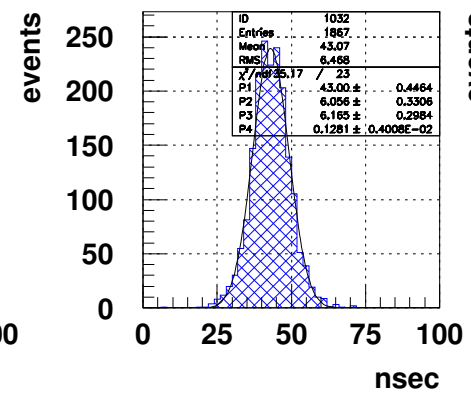
Time PI 2 ch 43



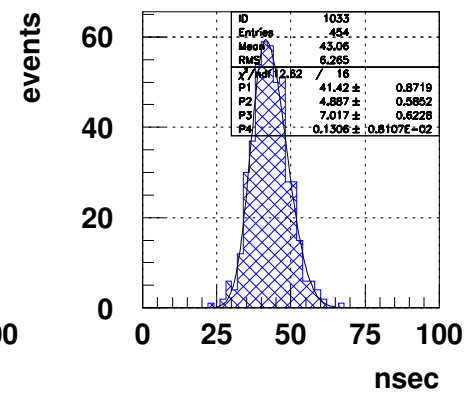
Time PI 2 ch 44



Time PI 3 ch 43



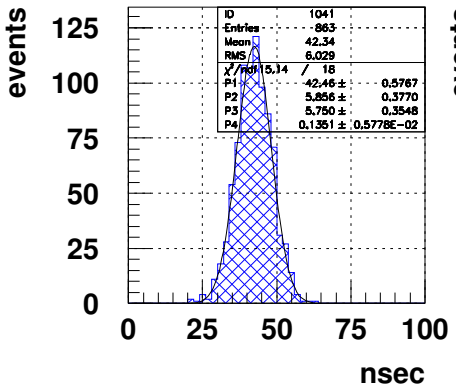
Time PI 3 ch 44



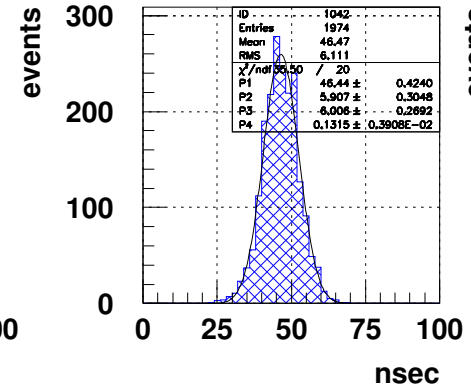
Time PI 3 ch 45

98/11/20 17.21

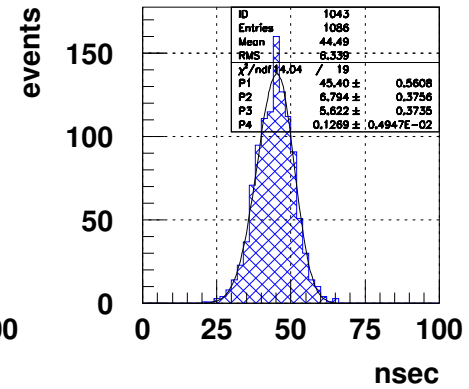
CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98



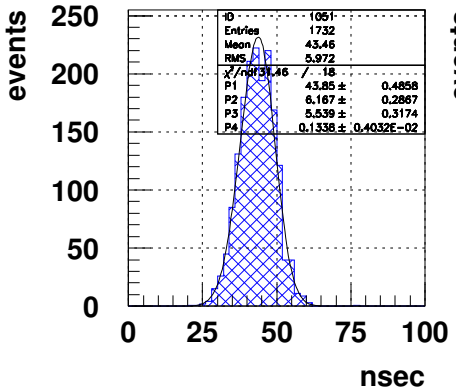
Time PI 4 ch 43



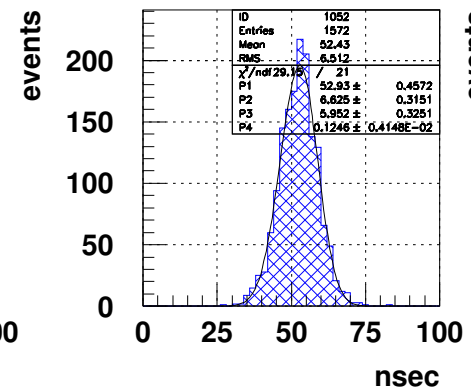
Time PI 4 ch 44



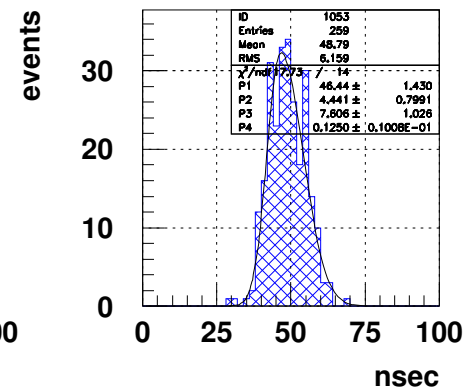
Time PI 4 ch 45



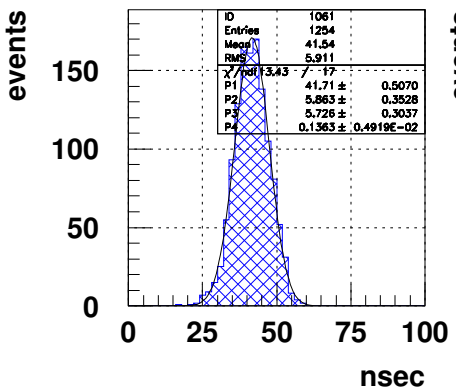
Time PI 5 ch 44



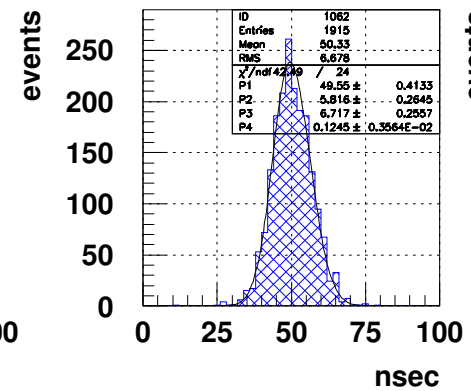
Time PI 5 ch 45



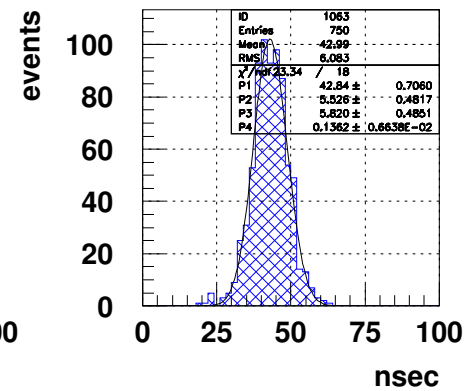
Time PI 5 ch 46



Time PI 6 ch 44



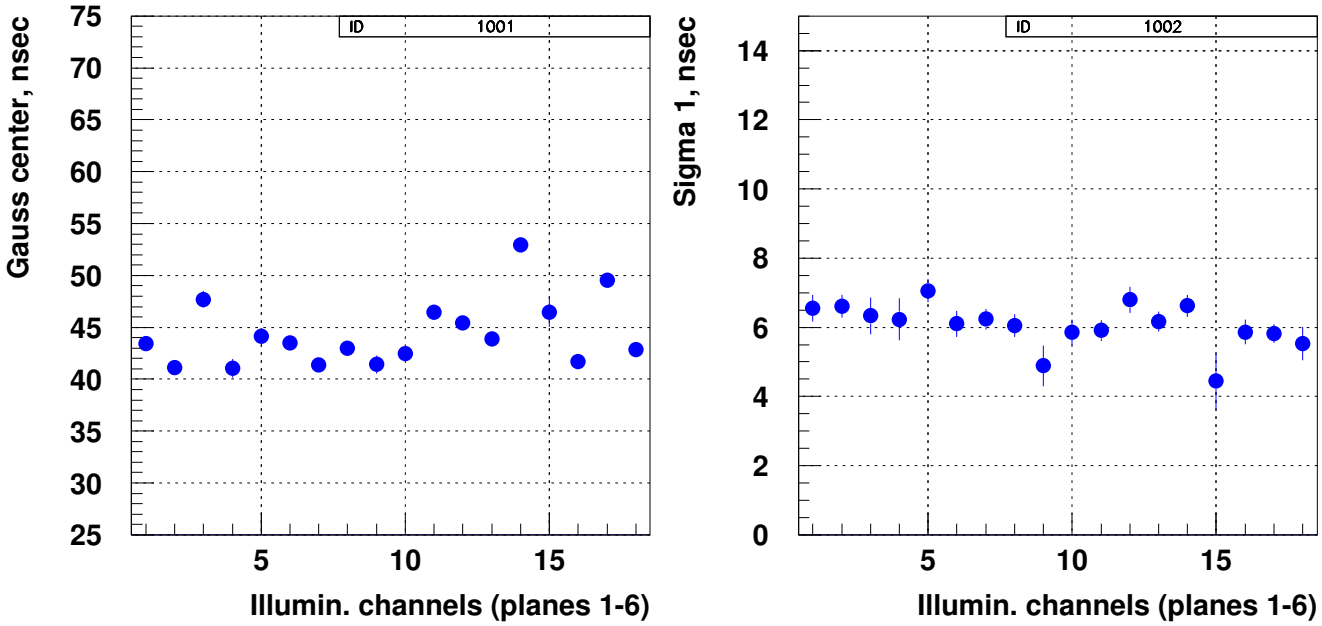
Time PI 6 ch 45

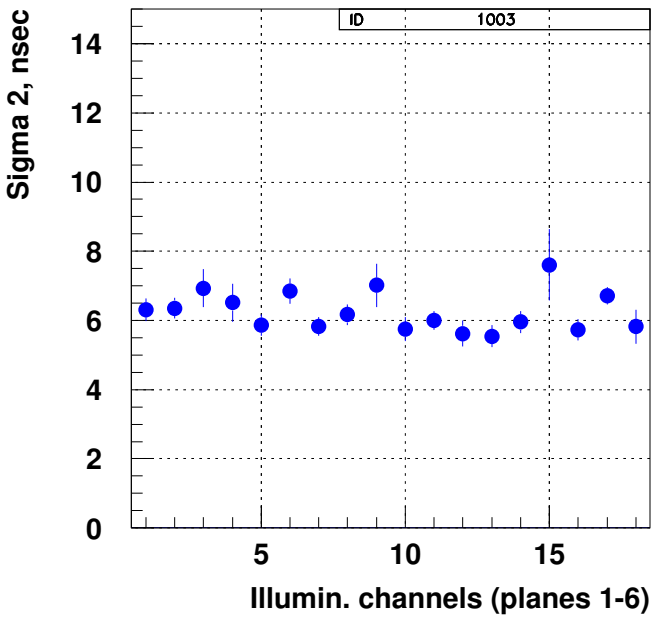


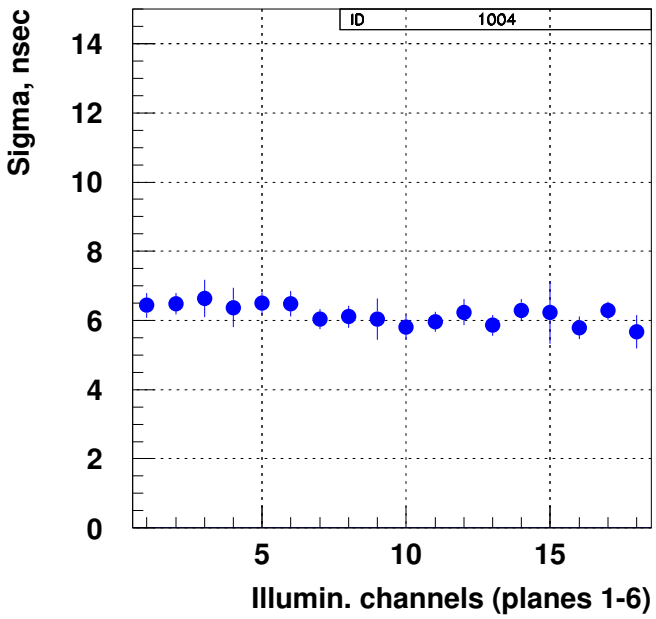
Time PI 6 ch 46

98/11/20 17.22

CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98

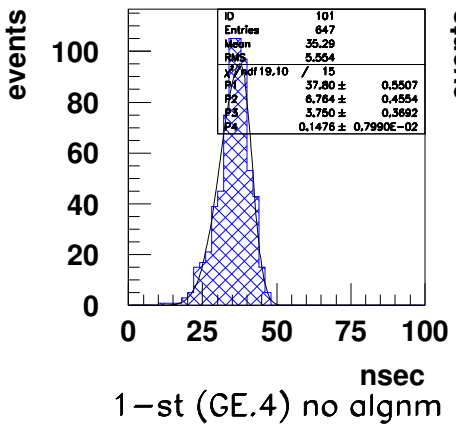




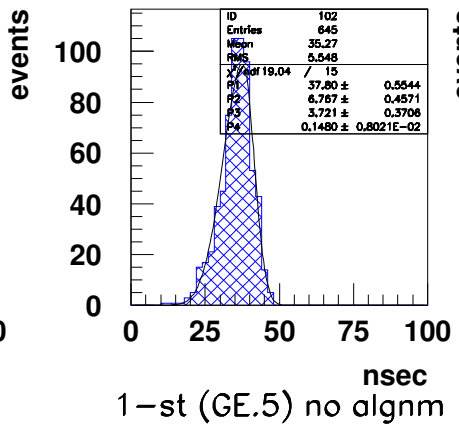


98/11/20 17.22

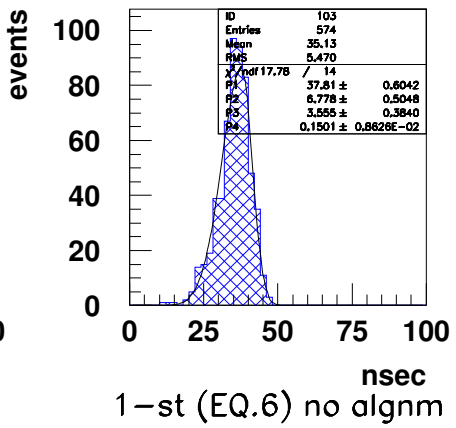
CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98



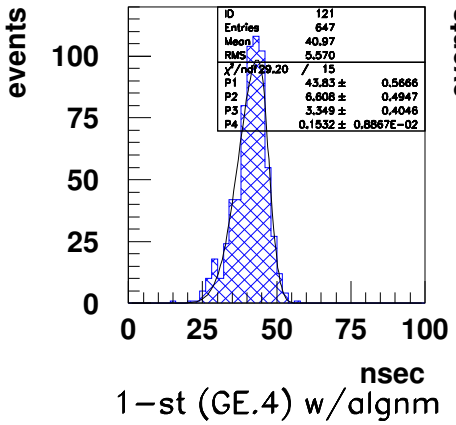
1−st (GE.4) no algnm



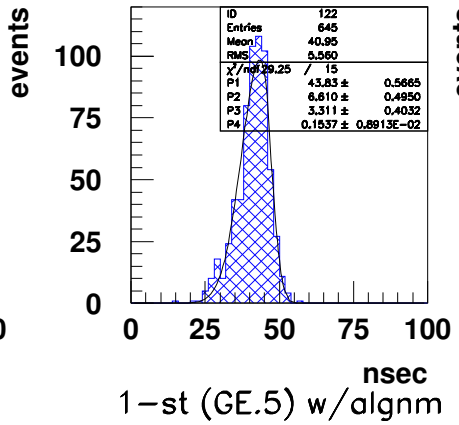
1−st (GE.5) no algnm



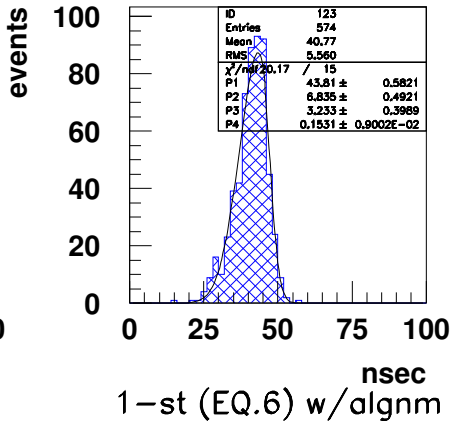
1−st (EQ.6) no algnm



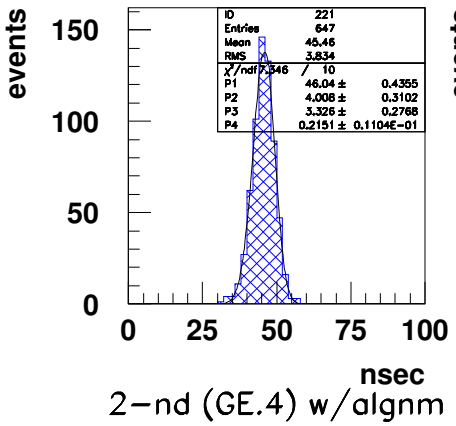
1−st (GE.4) w/algnm



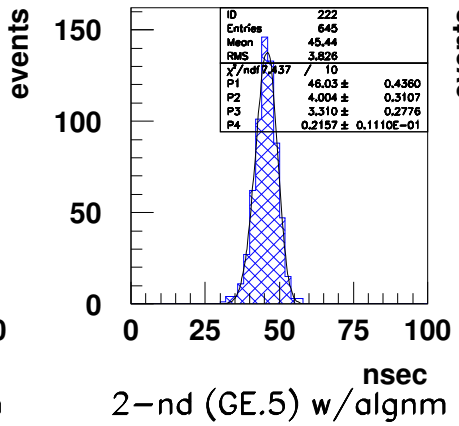
1−st (GE.5) w/algnm



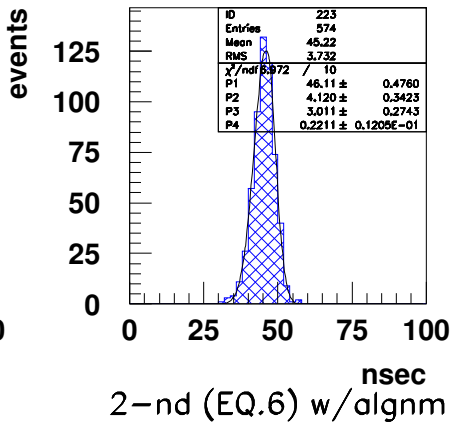
1−st (EQ.6) w/algnm



2−nd (GE.4) w/algnm



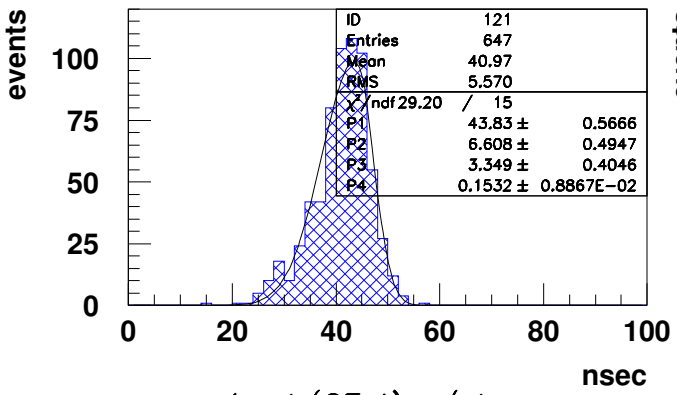
2−nd (GE.5) w/algnm



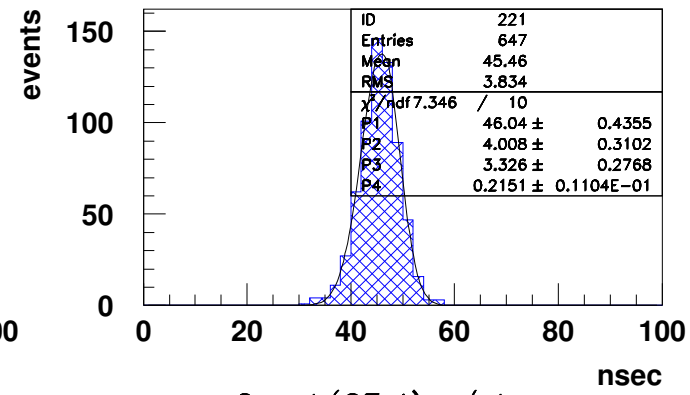
2−nd (EQ.6) w/algnm

98/11/20 17.23

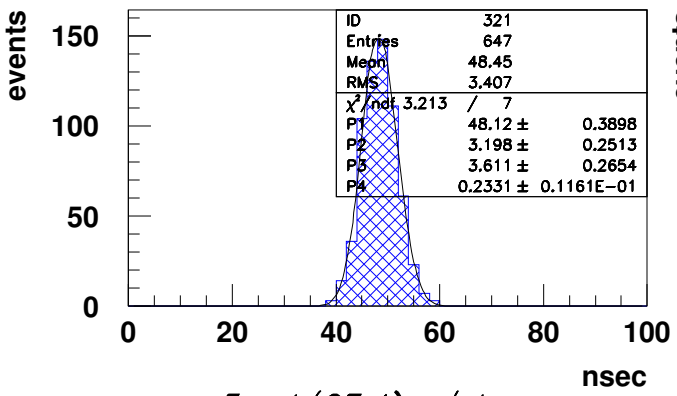
CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98



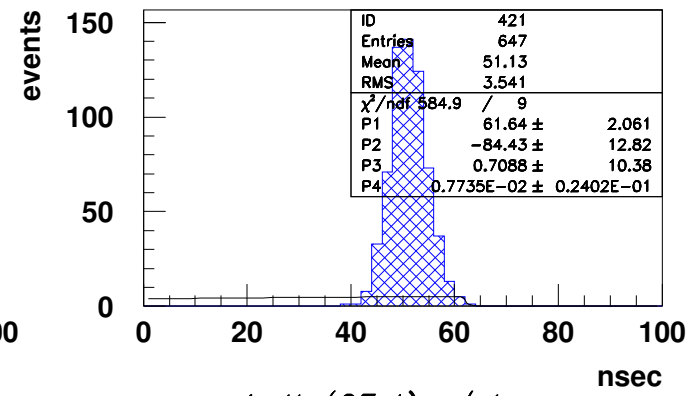
1−st (GE.4) w/algnm



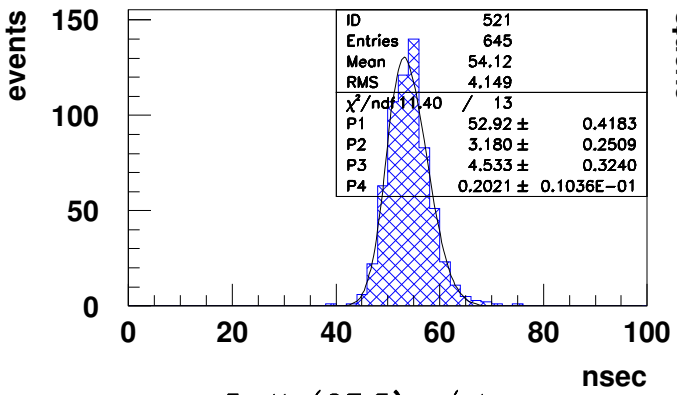
2−nd (GE.4) w/algnm



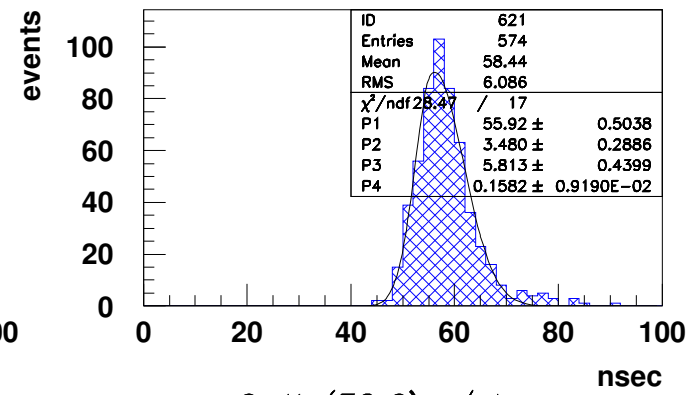
3−rd (GE.4) w/algnm



4−th (GE.4) w/algnm



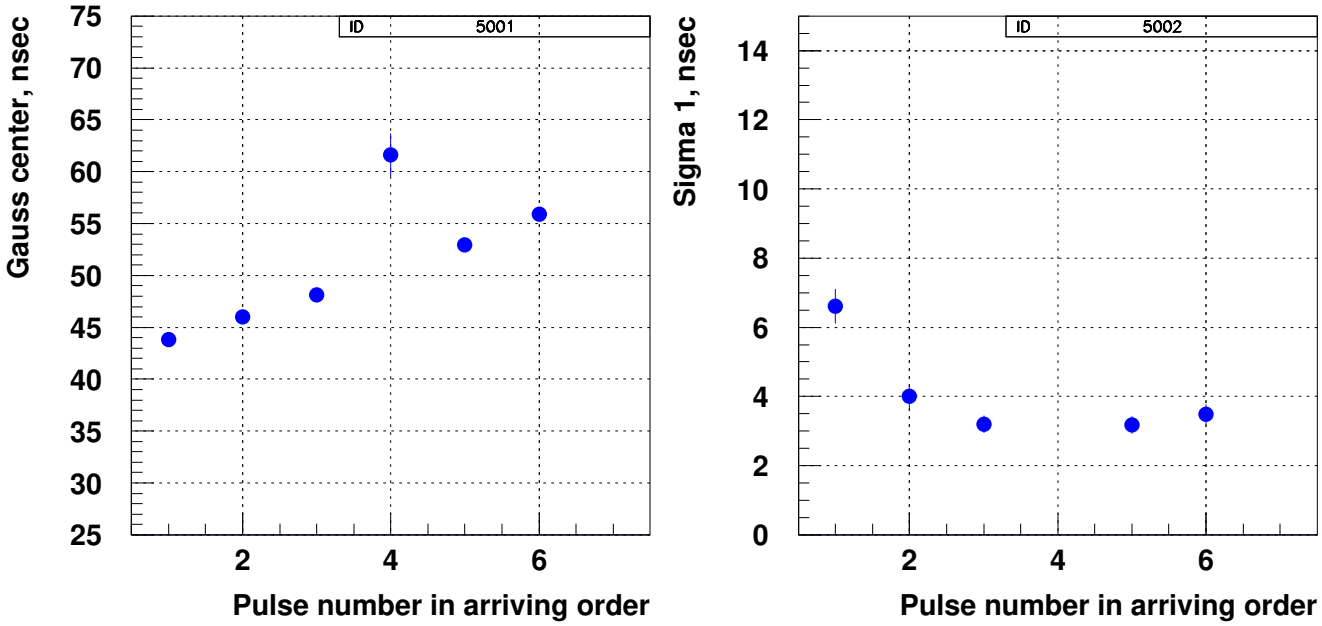
5−th (GE.5) w/algnm

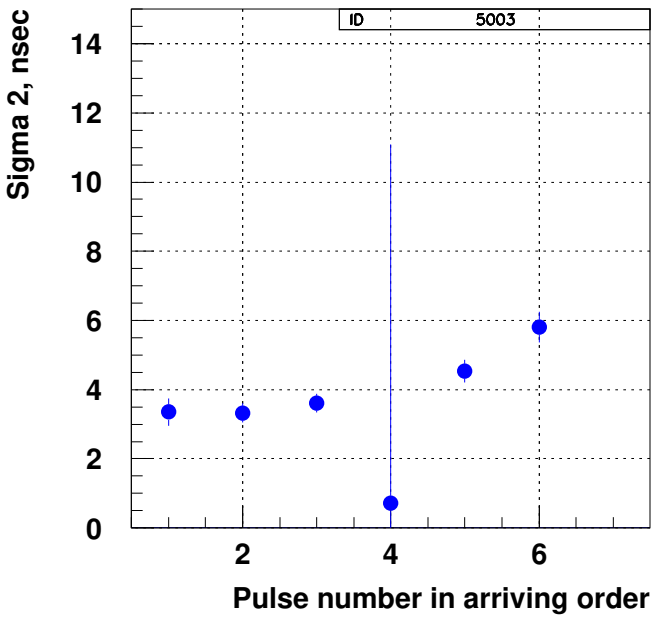


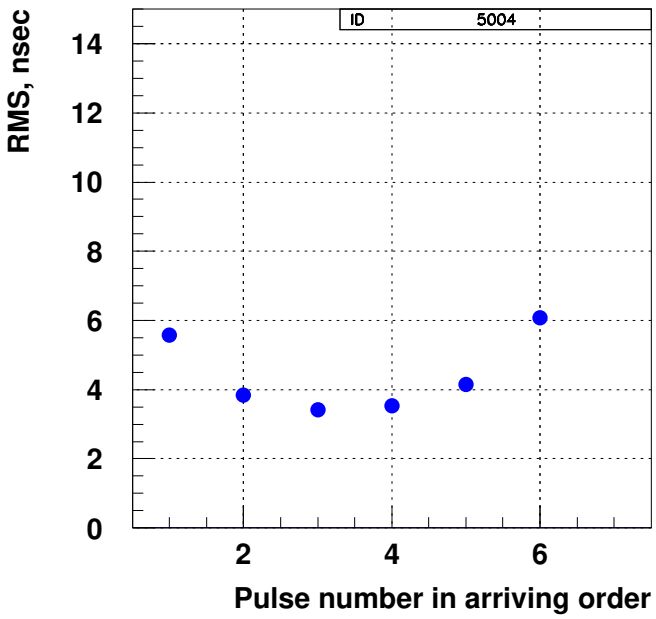
6−th (EQ.6) w/algnm

98/11/20 17.27

CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98

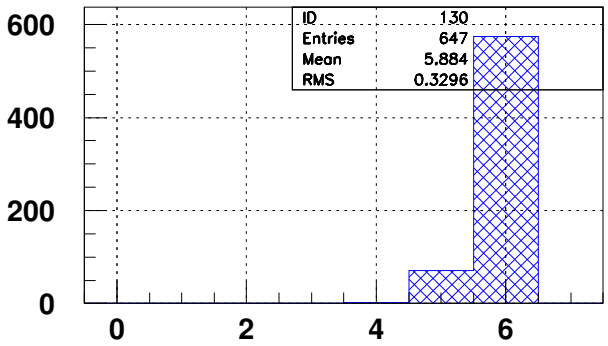




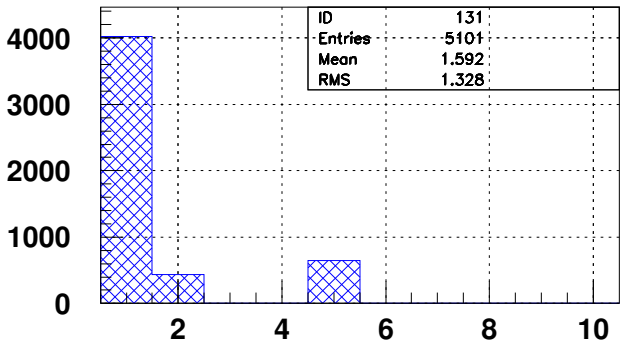


98/11/20 17.28

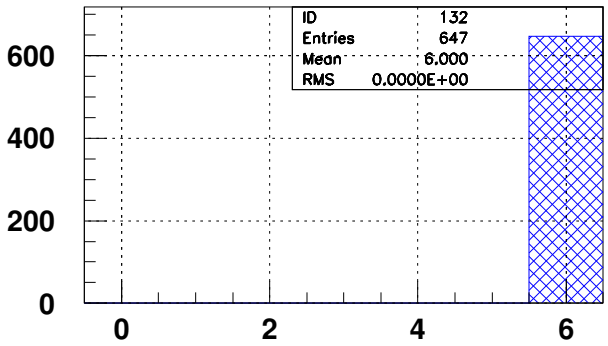
CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98



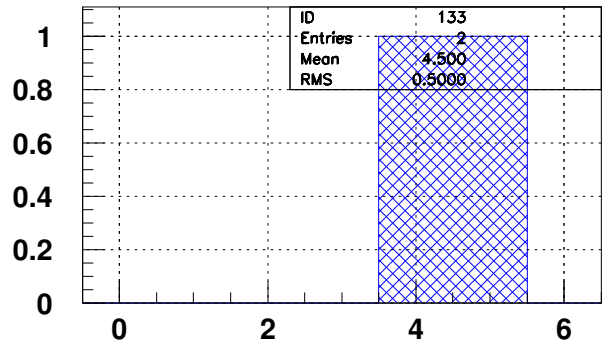
Nmb of planes ON



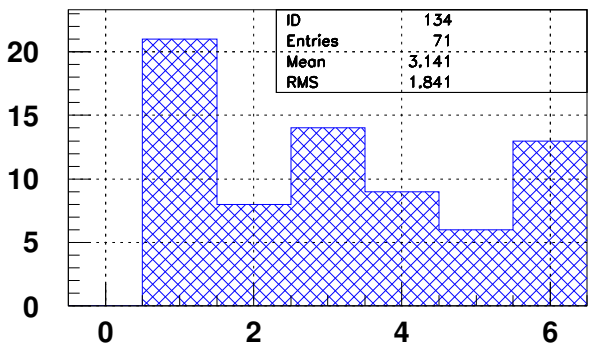
Nmb of surv.events vs cut nmb



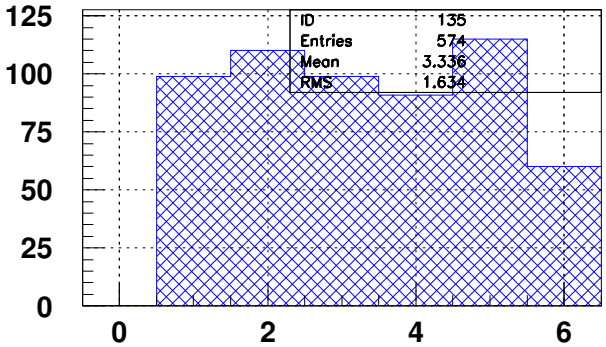
Nmb of pl in track (track thru sel. ch)



First plane number for 4 pl ON

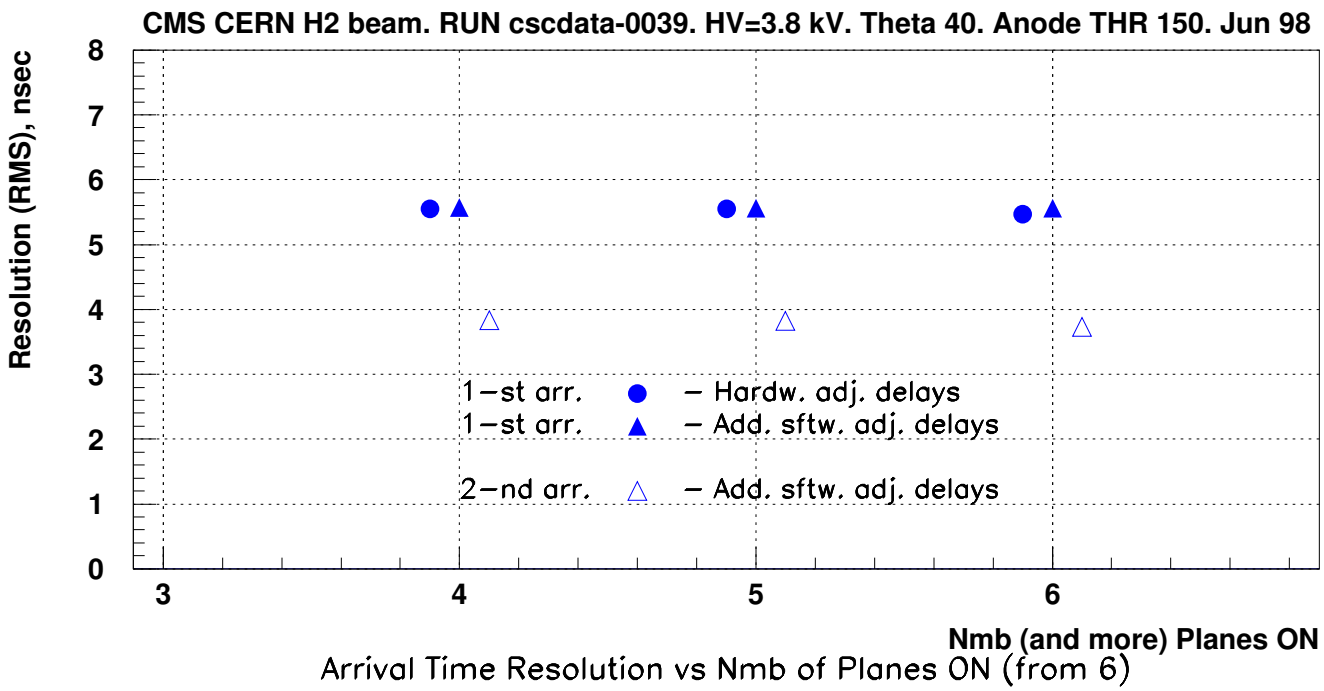


First plane number for 5 pl ON

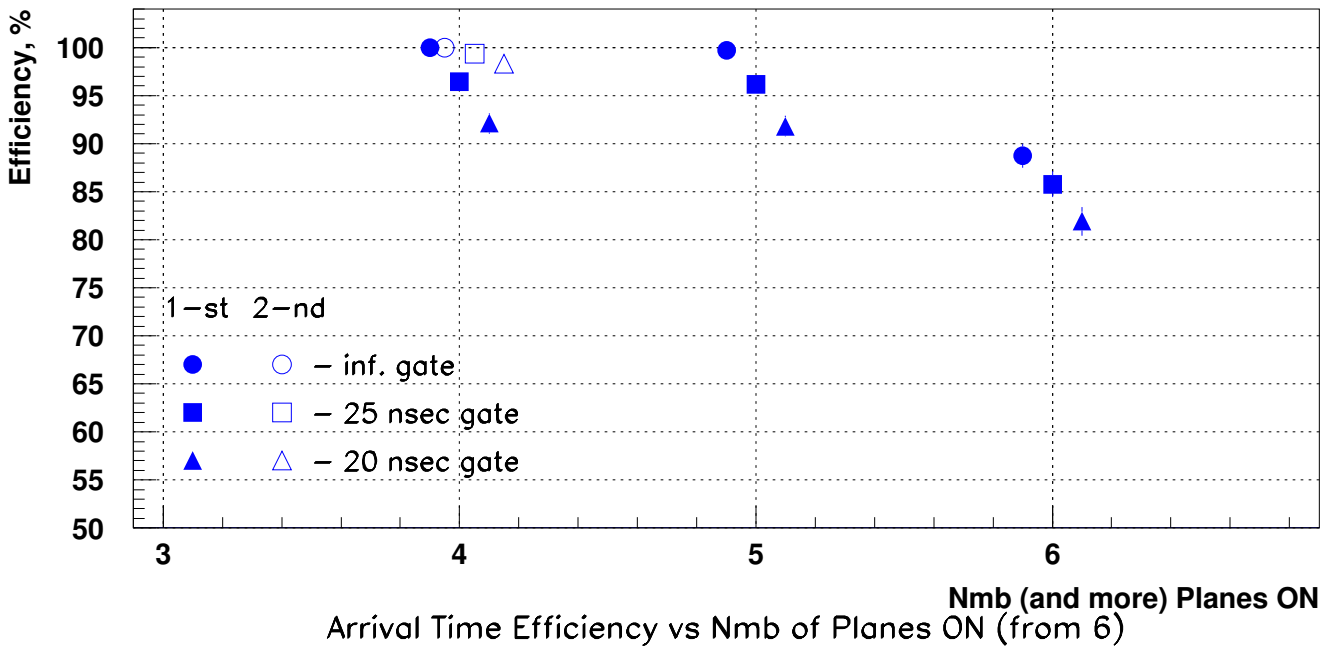


First plane number for 6 pl ON

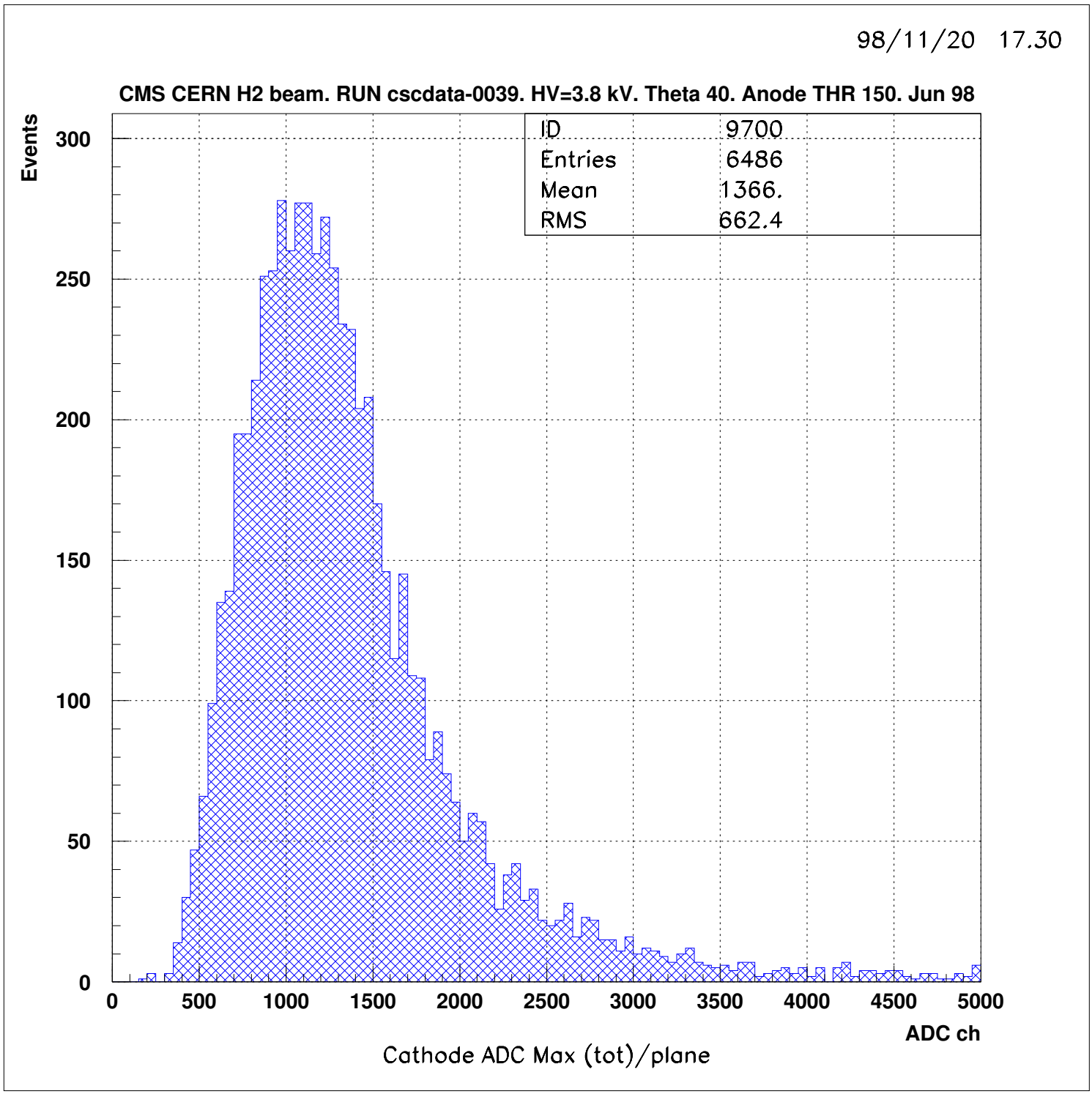
98/11/20 17.28



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

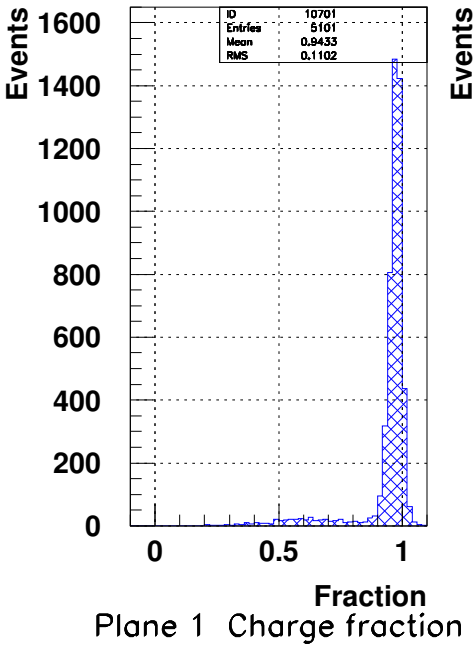


Arrival Time Efficiency vs Nmb of Planes ON (from 6)

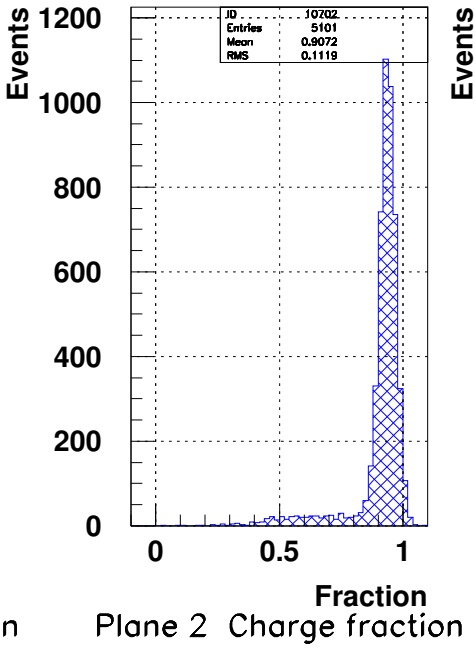

98/11/20 17.30
CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98
ID 9700
Entries 6486
Mean 1366.
RMS 662.4
Events
300
250
200
150
100
50
0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
ADC ch
Cathode ADC Max (tot)/plane

98/11/20 17.34

CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98



Plane 1 Charge fraction



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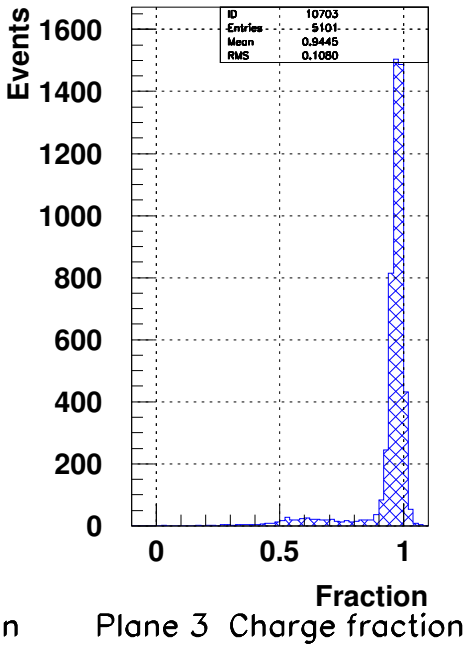

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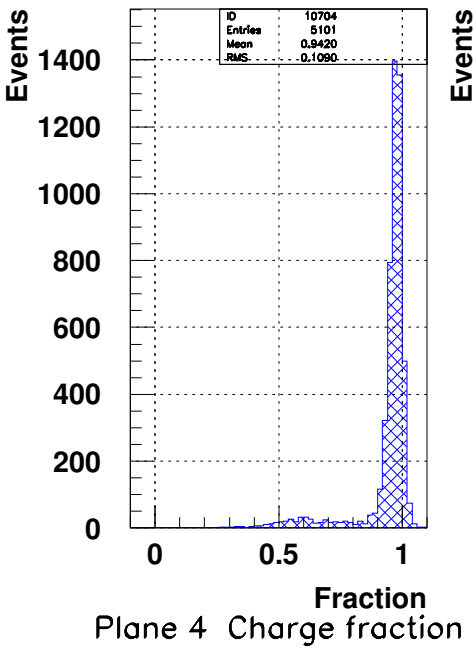
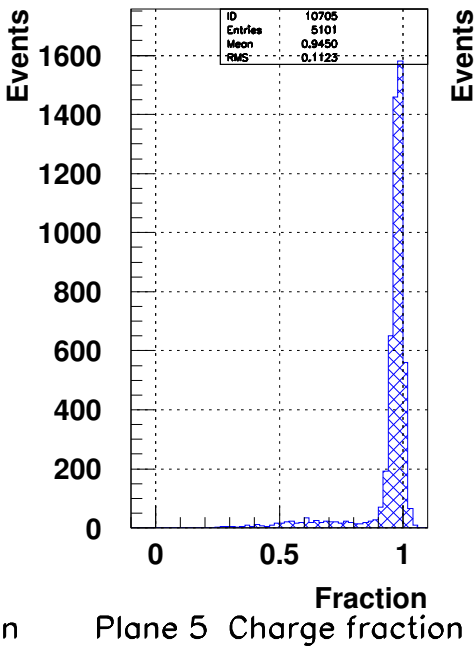
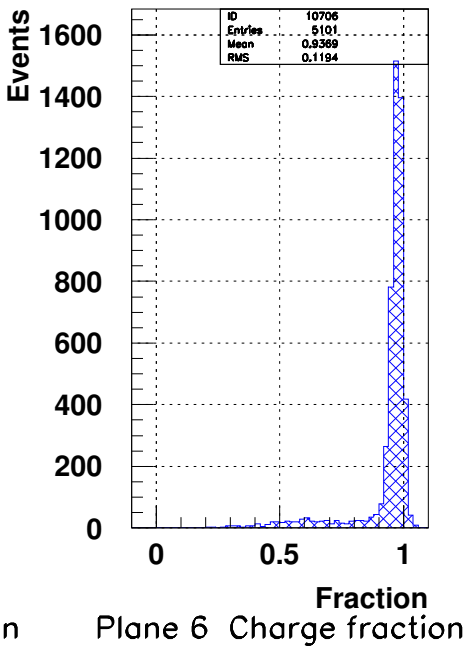


Plane 4 Charge fraction



Plane 5 Charge fraction



Plane 6 Charge fraction

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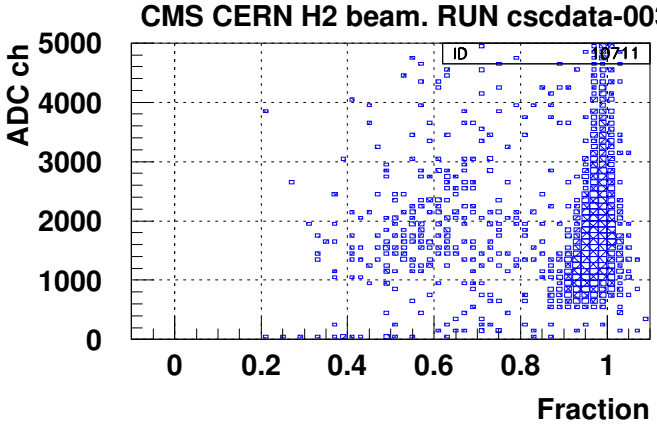
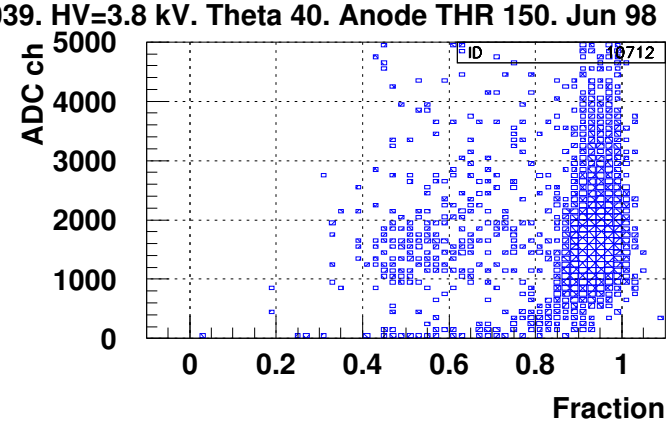
CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98



Plane 1 Charge vs chrg fr



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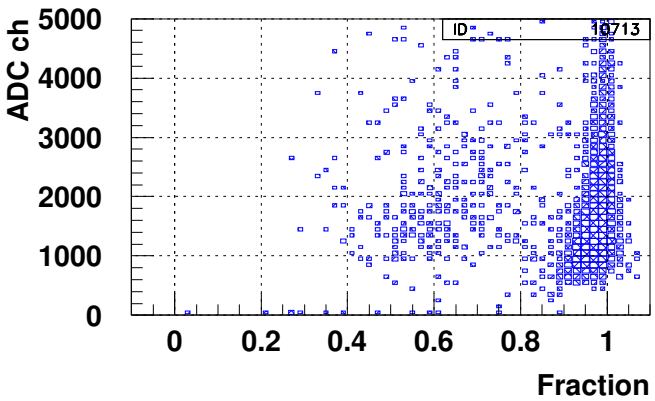

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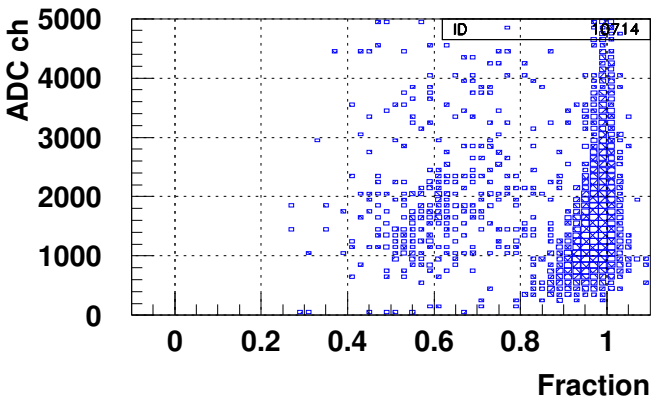

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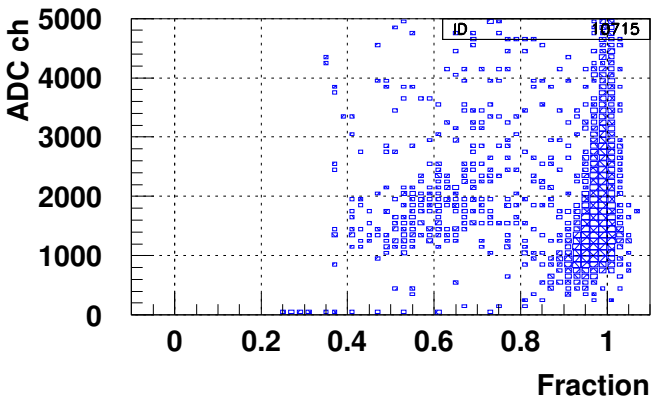
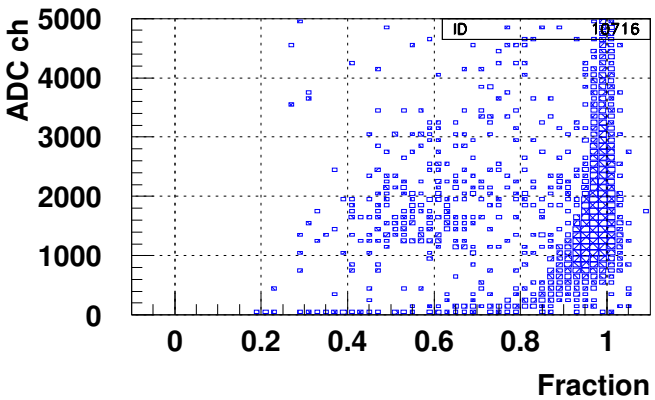


Plane 5 Charge vs chrg fr



Plane 6 Charge vs chrg fr

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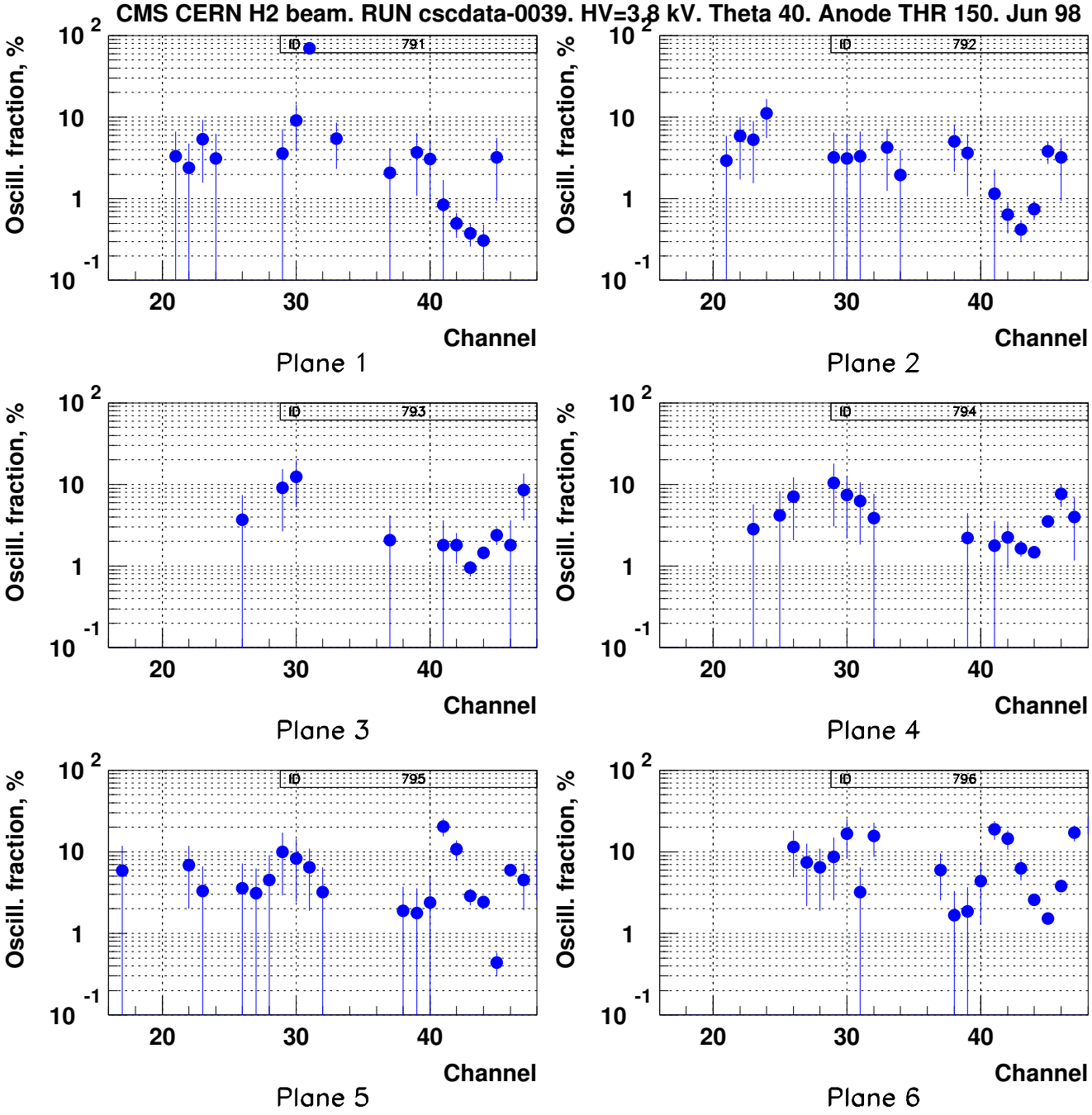
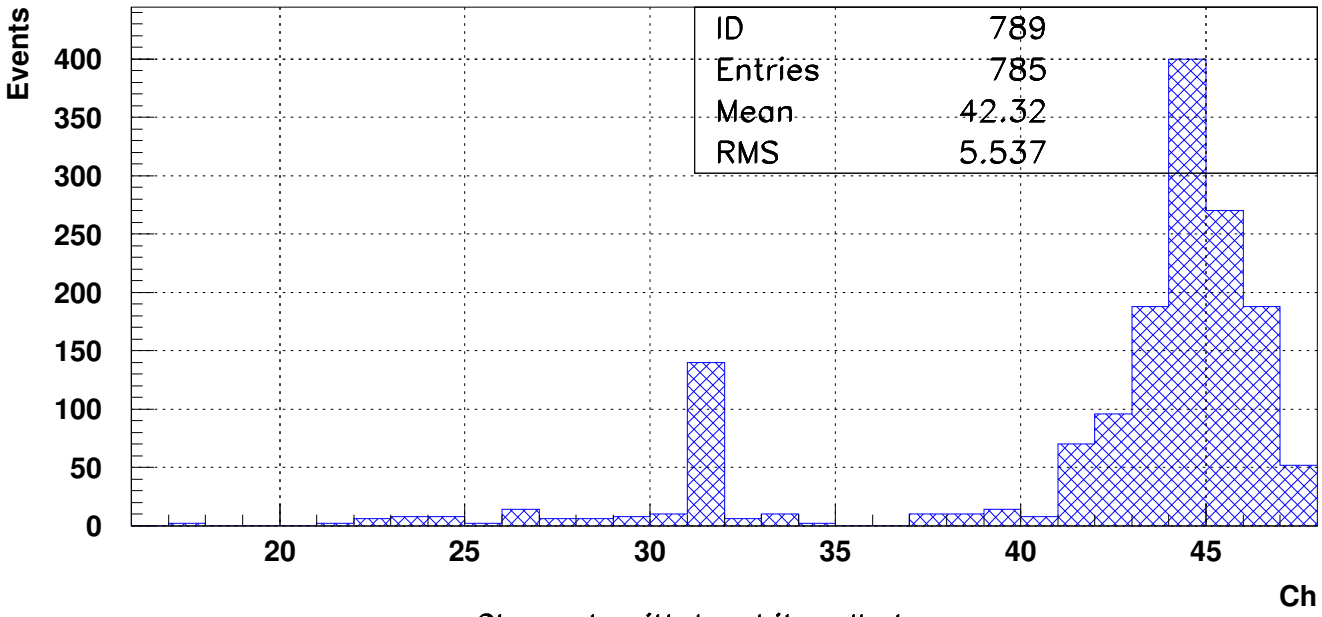
CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98

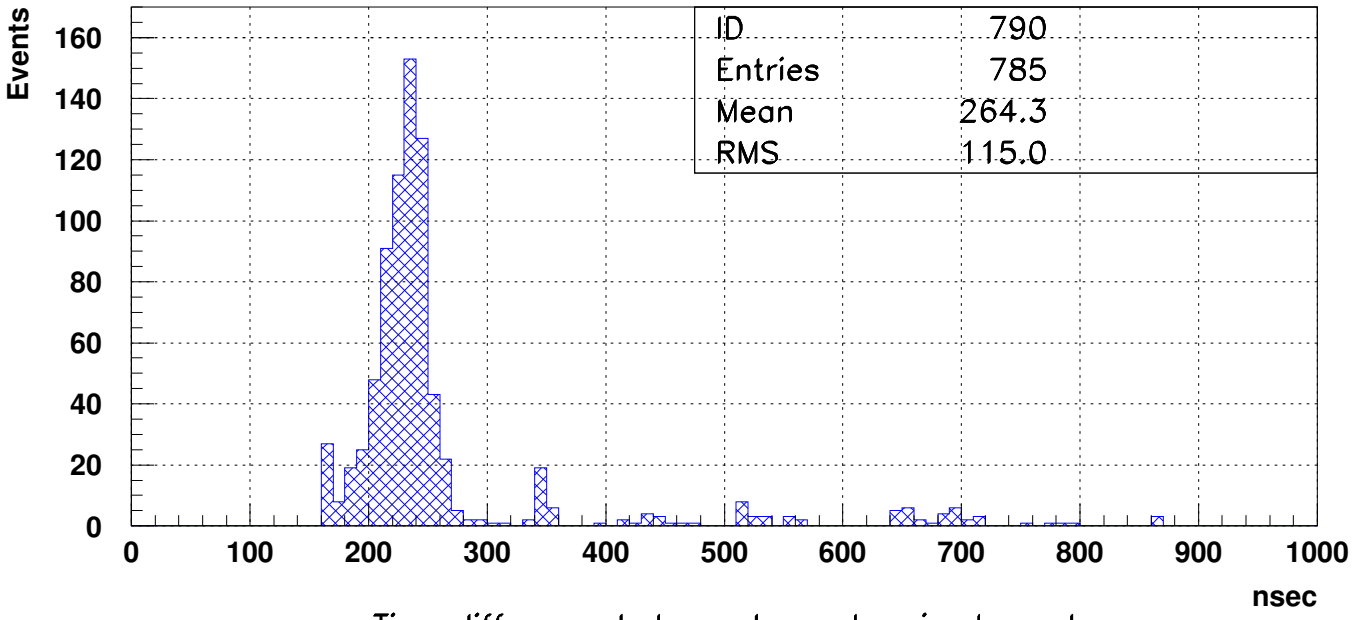


98/11/20 17.36

CMS CERN H2 beam. RUN cscdata-0039. HV=3.8 kV. Theta 40. Anode THR 150. Jun 98



Channels with two hits, all planes



Time difference between two pulses in channel